

CITY OF LIVERPOOL.



ANNUAL REPORT ON THE HEALTH OF LIVERPOOL.

1893.



BY

J. STOPFORD TAYLOR, M.D.,
LATE MEDICAL OFFICER OF HEALTH,

AND

E. W. HOPE, M.D., D.Sc.,
MEDICAL OFFICER OF HEALTH.

[Ordered by the Health Committee to be printed, 22nd March, 1894, and
31st May, 1894.

LIVERPOOL:

J. R. WILLIAMS & CO., PRINTERS, 8, SCHOOL LANE,

1894.



Digitized by the Internet Archive
in 2017 with funding from
Wellcome Library

<https://archive.org/details/b29737278>



REPORT, 1893.

THE population of Liverpool at the census of 1891 was 517,980, and the Registrar General estimated the population on July 1st of that year to be 517,145, the number on which the statistics for that period were calculated.

In 1892, assuming the same rate of decrease to continue as between 1881 and 1891, the estimated population was 513,818 ; and for this year, 1893, the number of people living within the City Boundaries was estimated to be 510,514.

How far this estimate may be correct there are no means of ascertaining without taking a fresh census, but it does certainly seem impossible that the population should have decreased by 6,631, when we find that there is a natural increase of population by excess of births over deaths of 13,417 during the three years, namely, of 3,921 in 1891, 5,087 in 1892, and 4,409 in 1893.

By adding the natural increase 13,417 to the calculated decrease 6,631, it shows a total loss of 20,048 people, who have to be accounted for by migration either into the suburbs or elsewhere.

The estimated population for the coming year, 1894, will show a further decrease to 507,230, on which basis the statistical returns will be prepared to the apparent detriment of the sanitary reputation of the City.

Notwithstanding this decrease, Liverpool continues the most densely-peopled city of any in Great Britain ; taking the whole area, 5,210 acres, within the Municipal Boundaries, the density is 97·9 persons per acre, and excluding the space occupied by the docks and quays (733 acres) the density is 114 per acre.

The total number of deaths in the City during the year was 13,919, being 1,248 more than in the previous year, 1892, giving a rate of mortality of 27·3 per 1,000 of the estimated population, and being 1·3 above the average rate of the last ten years (1883 to 1892), which was 26·0 per 1,000.

The deaths occurred during the year at the following periods :—

			No. of deaths.	Rate per 1,000.
1st quarter	...	...	3,282	25·7
2nd quarter	...	...	3,445	27·0
3rd quarter	...	...	3,621	28·4
4th quarter	...	...	3,571	28·0
			<hr/>	<hr/>
			13,919	27·3

The year was marked by an exceptional amount of sickness which affected all classes and increased the death rate considerably, though not to the extent of former unhealthy years before the sanitary condition of the City was so much improved. The epidemic of Scarlatina, which commenced in the Autumn of 1892, continued throughout the whole of the year and caused 231 deaths, 100 more than in the previous year ; though, comparatively speaking, a small number when contrasted with former epidemics of the same disease, as illustrated by the diagram at the end of the Report. Of the Zymotic diseases Diarrhœa was the most fatal, causing 866 deaths, the largest number in any year since 1880, when the deaths were 1,028. Of general diseases the most prevalent and fatal were those of the lungs, including Phthisis, which caused 4,515 deaths. From the large amount of sunshine and high average temperature experienced during the year, one would not have expected it to be so unhealthy and fatal, but the explanation is to be found in the absence of those strong currents of air consequent on changeable weather, which are so necessary to dissipate and neutralize the pernicious effects engendered by the aggregation of large masses of human beings on limited areas.

The following Table shews the periods of the year in which the deaths from the principal Zymotic diseases occurred, and their numbers.

First quarter, terminating April 1st—

Smallpox	...	...	...	...	...	6
Measles	...	...	...	...	...	44
Scarlatina	...	...	...	...	...	48
Whooping Cough	...	...	...	...	...	66
Diphtheria	...	...	...	...	...	9
Diarrhœa	...	...	...	...	...	29
Cholera	...	...	...	...	...	...
Influenza	...	...	...	...	...	10
Fever	{ Typhus	...	...	...	...	12
		...	...	...	...	24
		Other or doubtful	...	...	...	...

Second quarter, terminating July 1st—

Smallpox ...	...	...	...	...	...	1
Measles ...	...	...	...	...	...	111
Scarlatina... ...	...	...	...	...	...	48
Whooping Cough	...	...	...	...	...	78
Diphtheria	...	...	...	...	...	6
Diarrhœa ...	...	...	...	...	...	210
Cholera and Cholera Infantum	...	...	...	...	...	8
Influenza ...	...	...	...	...	...	7
Fever	{ Typhus Typhoid Other or doubtful	...	...	...	...	9
		...	...	...	...	34
	

Third quarter, terminating September 30th—

Smallpox ...	...	...	...	...	...	...
Measles ...	...	...	...	...	...	73
Scarlatina... ...	...	...	...	...	...	43
Whooping Cough	...	...	...	...	...	67
Diphtheria	...	...	...	...	...	12
Diarrhœa ...	...	...	...	...	...	566
Cholera and Cholera Infantum	...	...	...	...	...	25
Influenza ...	...	...	...	...	...	3
Fever	{ Typhus .. Typhoid Other or doubtful	...	...	...	...	12
		...	...	...	...	77
		...	...	...	...	3

Fourth quarter, terminating December 30th.

Smallpox ...	...	...	...	...	...	2
Measles ...	...	...	...	...	...	45
Scarlatina... ...	...	...	...	...	...	92
Whooping Cough	...	...	...	...	...	68
Diphtheria	...	...	...	...	...	20
Diarrhœa ...	...	...	...	...	...	61
Cholera ...	...	...	...	...	...	1
Influenza ...	...	...	...	...	...	58
Fever	{ Typhus... Typhoid Other or doubtful	...	...	...	...	11
		...	...	...	...	86
		...	...	...	...	1

NOTIFICATION OF INFECTIOUS DISEASES.

Each year's experience of the working of the Infectious Disease (Notification) Act, 1889, demonstrates its value as an indicator of the health of the community, and the smoothness with which it is carried out is due to the cordial co-operation of the Medical Profession with the Medical Officer, in furnishing him with all information appertaining to the cases of sickness under their charge.

The number of notifications received by the Medical Officer during the year was 7,086, as follows :—

January	...	...	...	...	...	390
February	...	...	...	...	...	383
March	...	...	...	...	...	353
April	...	...	...	...	...	368
May	...	...	...	...	...	486
June	...	...	...	...	...	513
July	...	...	...	...	...	565
August	...	...	...	...	...	552
September	...	...	...	...	...	803
October	...	...	...	...	...	1,063
November	...	...	...	...	...	877
December	...	...	...	...	...	733
				Total	...	<hr/> <hr/> 7,086

The diseases were specified as follows :—

3,568	Scarlet Fever.
1,428	Enteric ,,
147	Typhus ,,
153	Continued ,,
64	Fever.
82	Puerperal Fever.
90	Smallpox.
3	Cholera.
2	Choleraic Diarrhœa.
251	Diphtheria.
40	Membranous Croup.
1,258	Erysipelas.
<hr/>	
Total ...	<hr/> <hr/> 7,086

DIARRHŒA.

The most fatal of the Zymotics during the year was Diarrhœa, which was equally prevalent in all other districts as in Liverpool, and was evidently the consequence of the dryness and high temperature of the Spring and Summer months. March was exceptionally warm and dry, the mean temperature being 46·5 and the rainfall 0·531 ; April, the temperature averaged 51·0 and the rainfall only half-an-inch ; and in May the average mean temperature was 55·5 and the rainfall 1·657. In fact the average mean temperature of the whole year was 1·76 above the average, and the rainfall only reached 24·537 inches ; the first six months yielding 8·573 inches and the latter months 15·964, nearly twice the amount. The following table gives the weekly number of deaths from Diarrhœa, and the meterology during the most fatal period of the year :—

Week ending	Diarrhœa deaths.	Mean temperature.	Temperature, average for 20 years.	Being above or below average.
May	6	54·3	49·5	+
	13	55·8	50·5	+
	20	57·0	51·8	+
	27	55·1	53·5	+
June	3	55·1	54·5	+
	10	61·0	55·9	+
	17	64·2	57·0	+
	24	59·2	58·4	+
July	1	63·1	59·6	+
	8	66·1	60·4	+
	15	60·6	60·8	-
	22	59·7	61·2	-
	29	61·1	61·0	+
Aug.	5	59·3	60·8	-
	12	66·6	61·1	+
	19	70·0	61·0	+
	26	60·8	60·0	+
Sept.	2	58·9	59·0	-
	9	59·0	57·9	+
	16	58·3	56·8	+
	23	51·9	55·5	-
	30	53·7	54·0	-
Oct.	7	50·8	52·3	-
	14	52·7	50·5	+

The disease was of a more acute form than had been experienced for many years, and though, as usual, the children were the greatest sufferers, yet a large number of adults were attacked, and in some instances fatal results followed.

CHOLERA.

The first suspicious case was that of a police constable named Cathay, of 12, Elwy Street, who died at 6 a.m. on September 19th. The history is as follows :—He had been on duty during the night of the 17th, and was apparently in good health, on the forenoon of the 18th he had a slight attack of Diarrhoea but thought nothing of it, had a hearty dinner of cold roast pork, sage and onions, and appeared quite well ; at 5 p.m. he went out for a walk, returned at 6 and went to bed ; shortly after 7 he came downstairs and said he had vomited and went to the w.c. From this time he got gradually worse and expired the following morning, though medical assistance was obtained.

A post mortem was made, and a portion of the bowels with fluid contents sent to Dr. Thorne, Local Government Board, who reported that “culturally the case cannot be distinguished from true cholera.”

The second case was a man named Bethell, of No. 4, St. John’s Place, Northumberland Street. He had been a seaman, but latterly collected mussels and sold them in the streets. On Friday morning, October 6th, he left home in his usual health, but returned in the afternoon complaining of being sick and ill, which he attributed to mussels he had eaten. Notwithstanding this, he made a hearty dinner, and then was attacked with violent vomiting and purging, and subsequently with cramps in his toes, legs and arms. Medical aid was sought, but he died on the afternoon of the 7th.

A post mortem was made, and a portion of the bowels and contents sent to Dr. Barron, of University College, who reported that he “had obtained cultivations which are indistinguishable from those of Koch’s

Cholera Bacillus, and that therefore the case may be practically regarded as one of true Asiatic Cholera."

Every inquiry was made as to the possibility of the above men having been in communication with persons suffering from Cholera, or clothing or other material likely to be infected with the disease, but all the evidence was nil; nor did any other cases occur in the same houses or the same neighbourhood.

TYPHOID.

This disease was much more prevalent during the year than for a long time past ; the number of cases was 1,396, against 699 in 1892 and 588 in 1891. The number of deaths was 221, against 111 in 1892 and 92 in 1891. The percentage of deaths to cases was 15·8.

SMALLPOX.

During the fourth quarter of last year, 1892, there was an outbreak of Smallpox, introduced into the lodging-houses by vagrants coming from infected districts. The particulars are set out in the Report for that year. The disease continued during the first six months of this year, 1893, when 67 cases were reported, and the outbreak might be considered as stamped out. From our position, we are always liable to the importation of cases of this disease, but, as a rule, by isolating them in hospital the disease does not spread.

The total number of cases reported during the year was 75, of which 9 died, a percentage of 12·0. In the previous year, 177 were reported and 13 died, a percentage of 7·3.

Every return, without exception, shows that the mortality from Smallpox is controlled only by vaccination ; in proportion as a patient is effectually vaccinated, as evidenced by the number and character of the vaccination scars, so will his illness be mild and unimportant.

DIPHTHERIA.

There was an increase in the number of cases reported this year, 210 against 185 in the previous year. The number of deaths was 47 (a percentage of 22.3), being 35 below the average of the preceding ten years.

40 cases were reported of Membranous Croup and 16 died, a percentage of 40.

MEASLES.

This disease not being one of the notifiable ones in Liverpool, only a portion of the cases came under the notice of the Medical Officer, and chiefly from the reports of the School Board Inspectors. A record of 2,316 cases was kept to enable the Medical Officer to give certificates to the Council of Education accounting for the absence of children from school, so that the Government grants to the schools might be secured and the children not deprived of the awards for regular attendance.

Whenever it is thought desirable to remove cases of this disease, as from lodging-houses or milk shops, they are taken to the hospital of the Brownlow Hill Workhouse, the Corporation paying the expense incurred in their treatment and maintenance.

The following table shows the death rate per 1,000 of the population, and the number of deaths from Fever and Diarrhœa during the last twenty-eight years :—

Year.	Death Rate per 1,000 of Population.	Deaths from Diarrhœa.	Deaths from Fever.	Deaths from Relapsing Fever.
1866	41·7	1,145	1,523	...
1867	29·4	796	656	...
1868	29·1	1,108	841	...
1869	28·9	1,001	783	...
1870	31·1	1,151	572	355
1871	35·1	1,127	701	207
1872	27·0	998	451	25
1873	25·8	906	335	...
1874	31·9	879	449	...
1875	27·5	842	490	...
1876	27·5	694	398	...
1877	26·4	605	382	...
1878	29·3	979	375	...
1879	26·9	402	248	...
1880	27·2	1,028	256	...
1881	26·7	508	292	...
1882	*27·0	587	593	...
1883	*27·7	518	540	...
1884	*26·6	841	205	...
1885	*25·6	422	182	...
1886	*26·1	781	198	...
1887	*26·4	619	194	...
1888	*23·1	431	161	...
			Typhus. Typhoid. Continued.	
1889	*24·9	575	45 167	...
1890	*27·5	468	23 99 1	...
1891	26·9	330	37 92 2	...
1892	24·7	415	18 111 2	...
1893	27·3	866	44 221 5	...

* Calculated on corrected population as per Census Returns of 1891.

CANCER.

All deaths from malignant growths are entered under the one definition, "Cancer."

(See Tables I. and II.)

TABLE I.

Year.	Males.	Females.	Total.	Percentage of Deaths from Cancer to Total Deaths.	Death Rate per 1,000 of the Population from Cancer.
1869	42	124	166	1·1	0·34
1874	63	146	209	1·3	0·40
1879	86	175	261	1·8	0·48
1884	100	163	263	1·8	0·49
1888	111	206	317	2·6	0·60
1889	121	170	291	2·2	0·56
1890	122	212	334	2·3	0·64
1891	135	211	346	2·5	0·67
1892	122	181	303	2·4	0·59
1893	124	217	341	2·5	0·66

TABLE II.
DEATHS FROM CANCER DURING THE YEAR 1893.

DISEASE.	WARDS, &c.		Males.	Females.	Total.
	North Toxteth.	South Toxteth.			
Aberromby.					
Everton.					
Kirkdale.					
West Derby.					
North Toxteth.					
Hospitals.					
Total.	13	1	2	1	14

During the fifty-two weeks of the year 1893 (terminating on Saturday, December 30th, 1893), the Returns of the Local Registrars recorded 18,328 births and 13,919 deaths within the City ; the numbers for the corresponding period of the previous year, 1892, were 17,758 births and 12,671 deaths.

Of the births 9,324 were males and 9,004 were females, making the total Birth-rate of the City equal to 36·0 per 1,000 ; the average of the previous ten years being 35·2.

The distribution of the births in the different wards and districts of the City has been arranged in the following table :—

BIRTHS.

DISTRICTS AND WARDS.	1st Quarter.		2nd Quarter.		3rd Quarter.		4th Quarter.		Annual.
	Male.	Fe-male.	Male.	Fe-male.	Male.	Fe-male.	Male.	Fe-male.	Births
Scotland	271	273	255	264	272	237	240	215	2027
Vauxhall	25	31	35	32	45	31	30	19	248
St. Paul's and Exchange....	51	46	39	38	43	33	51	50	351
St. Anne's and Lime Street..	95	115	93	107	96	106	79	97	788
Castle Street and St. Peter's..	11	14	12	15	9	9	11	12	93
Pitt Street and Gt. George..	58	54	51	43	46	50	50	36	388
Rodney St. & Abercromby..	158	132	172	163	155	160	137	133	1210
Everton	554	512	511	497	519	493	503	516	4105
Kirkdale.....	310	325	327	309	296	297	320	295	2479
West Derby	364	332	377	360	360	369	347	343	2852
The Toxteths.....	515	500	472	466	499	447	460	428	3787
City.....	2412	2334	2344	2294	2340	2232	2228	2144	18328

DEATHS.

Of the 13,919 deaths 7,070 were of males, and 6,849 of females.

The Death-rate of the City was equal to 27·3 per 1,000. The average of the previous ten years was 26·0 per 1,000.

The following table shows the actual number of deaths registered in the City previous to the transference to the districts from whence the patients were removed, of the deaths occurring in the Workhouses and Hospitals.

The deaths occurred in the following districts :—

DISTRICTS.	1st Quarter.		2nd Quarter.		3rd Quarter.		4th Quarter.		Annual. Deaths.
	Male.	Fe-male.	Male.	Fe-male.	Male.	Fe-male.	Male.	Fe-male.	
Scotland	116	165	175	152	215	190	182	188	1383
Vauxhall	30	27	21	17	28	15	23	28	189
St. Paul's and Exchange	34	29	41	43	30	53	35	37	302
St. Anne's and Lime Street	67	70	64	84	78	79	73	78	593
Castle Street and St. Peter's	4	3	12	11	16	7	17	7	77
Pitt Street and Great George	27	45	33	37	56	49	42	46	335
Rodney Street and Abercromby	58	92	65	76	83	80	70	77	691
Everton	303	340	330	310	333	337	291	333	2577
Kirkdale	175	166	180	153	206	184	160	198	1422
West Derby.....	179	192	204	224	191	210	189	212	1601
The Toxteths	232	268	248	244	273	294	291	266	2116
Workhouses and Hospitals	400	260	441	280	352	262	397	331	2723
City	1625	1657	1814	1631	1861	1760	1770	1801	13919

From the returns made as to the residences of persons dying in the Workhouses and Hospitals of the town, we are able to classify 2,296 of the deaths in these establishments under the Wards from whence the patients were removed, viz. :—439 under Scotland Ward, 92 under Vauxhall Ward, 77 under St. Paul's Ward, 76 under Exchange Ward, 261 under St. Anne's Ward, 87 under Lime Street Ward, 2 under Castle Street Ward, 35 under St. Peter's Ward, 81 under Pitt Street Ward, 64 under Great George's Ward, 82 under Rodney Street Ward, 99 under Abercromby Ward, 361 under Everton, 147 under Kirkdale, 179 under West Derby Ward, 112 under North Toxteth Ward, and 101 under South Toxteth Ward. This will leave unclassified 86 deaths of persons whose previous residences were either unknown or not specified ; and these, in the absence of definite information, have been placed in the Wards in proportion to the number of total deaths ; and 341 who were residents outside the city.

The results of the alterations occasioned by this re-arrangement of the deaths in the wards and districts will be shown in the following table, from which a calculated rate of mortality per 1,000 per annum of the inhabitants has been made. The rates are calculated upon a population increasing or decreasing in the same ratio as between 1881 and 1891. The same applies to the third column of figures showing the corrected average during the preceding ten years.

WARDS.	1893.		Corrected Average Rate per 1000 during the 10 years 1883—1892.
	Deaths.	Rate per 1000	
Scotland	1834	36·3	34·0
Vauxhall	283	46·9	43·2
St. Paul's	227	37·3	31·4
Exchange	230	40·6	38·6
St. Anne's	696	37·2	36·6
Lime Street	252	34·7	28·1
Castle Street	14	16·1	19·8
St. Peter's	100	26·7	23·8
Pitt Street	218	40·3	34·3
Great George	264	31·8	32·2
Rodney Street	394	26·3	22·6
Abercromby	394	19·7	19·6
Everton	2957	26·7	23·5
Kirkdale	1579	23·5	22·4
West Derby	1791	22·9	21·5
North Toxteth	1377	20·9	21·1
South Toxteth	968	23·3	26·0
Hospitals (Residences outside City) ..	341	..	..
City	13919	27·3	26·0

The following table shows the natural increase or decrease of population, and the number of births and deaths during the year 1893, in the several districts of the City :—

DISTRICTS AND WARDS.	Births.	Deaths.	Increase.	Decrease
Scotland	2027	1834	193	..
Vauxhall	248	282	..	34
St. Paul's and Exchange	351	458	..	107
St. Anne's and Lime Street	788	948	..	160
Castle Street and St. Peter's	93	114	..	21
Pitt Street and Gt. George	388	483	..	95
Rodney Street and Abercromby	1210	787	423	..
Everton	4105	2957	1148	..
Kirkdale	2479	1579	900	..
West Derby	2852	1791	1061	..
The Toxteths	3787	2345	1442	..
City	18328	13578	4750	..
Hospitals (Residences outside City) .. .. .. .. ..	..	341	..	..
Total	18328	13919	4409	..

The following table, taken from the Registrar-General's Reports, will enable us to compare the mortality of Liverpool with thirty-five of the large towns of the United Kingdom:—

TOWNS.	Estimated Population in the middle of the year 1893.	Births in 52 Weeks, ending 30th Dec., 1893.	Deaths in 52 Weeks, ending 30th Dec., 1893.	Annual Rate to 1,000 of Population.		Population on Acre.
				Births.	Deaths.	
London	4306411	132975	91536	31·0	21·3	57·7
West Ham	227405	8083	4288	35·6	18·9	48·3
Croydon	108997	2852	1772	26·2	16·3	12·1
Brighton	117833	2981	2165	25·4	18·4	46·6
Portsmouth	167277	4709	3039	28·2	18·2	38·7
Plymouth	86781	2590	1839	29·9	21·2	56·4
Bristol	225028	6814	4249	30·4	18·9	50·4
Cardiff	142435	5121	2796	36·1	19·7	23·5
Swansea	93816	3285	1836	35·1	19·6	18·4
Wolverhampton	84298	2902	1956	34·5	23·3	23·9
Birmingham	487891	15916	10693	32·7	22·0	38·4
Norwich	104184	3210	2003	30·9	19·3	13·8
Leicester	184547	6006	3683	32·6	20·0	21·5
Nottingham	220551	6642	4061	30·2	18·5	20·1
Derby	97341	3123	1771	32·2	18·2	28·2
Birkenhead	103817	3431	2127	33·1	20·5	29·8
Bolton	117278	3874	2821	33·1	24·1	49·8
Manchester	515598	17268	12801	33·6	24·9	39·9
Salford	203431	7047	4886	34·7	24·1	39·3
Oldham	136469	3896	2860	28·6	21·0	28·9
Burnley	93462	3161	2039	33·9	21·9	23·8
Blackburn	124005	3822	2879	30·9	23·3	17·8
Preston	110225	3855	2899	35·1	26·4	27·0
Huddersfield	97549	2313	1673	23·8	17·2	8·2
Halifax	91918	2253	1591	24·6	17·4	10·8
Bradford	221611	6132	4632	27·7	21·0	20·5
Leeds	382093	12349	8493	32·4	22·3	17·7
Sheffield	333922	11591	7428	34·8	22·3	17·0
Hull	208709	7125	4545	34·2	21·8	25·4
Sunderland	134515	4771	3022	35·6	22·5	46·9
Gateshead	90938	3309	1750	36·5	19·3	29·0
Newcastle-on-Tyne	196997	6624	4126	33·7	21·0	36·7
Edinburgh	267261	7429	5268	27·9	19·8	45·3
Glasgow	677883	23130	15789	34·2	23·4	57·6
Dublin	349594	10009	9409	28·7	27·0	14·1
LIVERPOOL	510514	18328	13919	36·0	27·3	97·9

The deaths of Children below five years of age amounted to 6,035, and thus comprised 43·3 per cent. of the whole deaths ; the average number for the preceding ten years was 6,055, and the average percentage 44·1. The deaths of Infants below one year of age amounted to 3,863, showing that 21·0 per cent. of the children born within the city during the year, died before attaining the age of twelve months.

The following table indicates the incidence, in the various wards of the city, of Infantile Mortality.

WARDS.	Quarters.				Annual.	Per Cent- age of Deaths under 5 years to Total Deaths.	Per Cent- age of Deaths under 1 year to Total Births.
	March.	June.	Sept.	Dec.			
Scotland .. { Total Deaths..	281	327	405	370	1383	{ 55·0	23·2
.. { Below 5 years..	114	189	267	191	761	}	
Vauxhall .. { Total Deaths..	57	38	43	51	189	{ 51·3	24·6
.. { Below 5 years..	16	22	31	28	97	}	
St. Paul's .. { Total Deaths..	31	33	41	44	149	{ 41·6	20·2
.. { Below 5 years..	4	15	21	22	62	}	
Exchange .. { Total Deaths..	32	51	42	28	153	{ 35·9	
.. { Below 5 years..	10	20	17	8	55	}	
St. Anne's .. { Total Deaths..	96	103	109	121	429	{ 54·0	24·4
.. { Below 5 years..	47	64	60	61	232	}	
Lime Street .. { Total Deaths..	41	45	48	30	164	{ 45·1	
.. { Below 5 years..	16	18	28	12	74	}	
Castle Street .. { Total Deaths..	1	5	4	2	12	{ 16·6	24·7
.. { Below 5 years..	..	1	1	..	2	}	
St. Peter's .. { Total Deaths..	6	18	19	22	65	{ 47·7	
.. { Below 5 years..	2	8	10	11	31	}	
Pitt Street .. { Total Deaths..	31	32	36	37	136	{ 44·8	23·7
.. { Below 5 years..	11	11	16	23	61	}	
Great George .. { Total Deaths..	41	38	69	51	199	{ 47·2	
.. { Below 5 years..	15	15	41	23	94	}	
Rodney Street .. { Total Deaths..	72	76	88	73	309	{ 39·4	12·5
.. { Below 5 years..	18	24	50	30	122	}	
Abercromby .. . { Total Deaths..	78	65	75	74	292	{ 35·9	
.. { Below 5 years..	22	25	35	23	105	}	
Everton { Total Deaths..	643	640	670	624	2577	{ 54·2	22·1
.. { Below 5 years..	295	386	431	286	1398	}	
Kirkdale { Total Deaths..	341	333	390	358	1422	{ 52·5	18·7
.. { Below 5 years..	143	190	254	159	746	}	
West Derby { Total Deaths..	371	428	401	401	1601	{ 51·2	19·8
.. { Below 5 years..	164	239	240	177	820	}	
North Toxteth { Total Deaths..	314	278	307	357	1256	{ 42·6	
.. { Below 5 years..	110	105	174	146	535	}	
South Toxteth { Total Deaths..	186	214	260	200	860	{ 56·1	18·5
.. { Below 5 years..	78	122	177	106	483	}	
Workhouses and .. { Total Deaths..	660	721	614	728	2723	{ 13·1	..
Hospitals { Below 5 years..	69	104	76	108	357	}	
City { Total Deaths..	3282	3445	3621	3571	13919	{ 43·3	21·0
.. { Below 5 years..	1134	1558	1929	1414	6035	}	

The following table gives a classification of the actual causes of death during the four quarters of the year, and specifies the number of deaths from each of the principal Zymotic Diseases.

CLASSES.	QUARTERS.				YEAR 1893.
	March.	June.	Sept.	Dec.	
1. Zymotic Diseases	314	574	954	500	2342
2. Diseases of Uncertain Seat	91	102	116	113	422
3. Tubercular Diseases	444	462	419	406	1731
4. Diseases of Brain, &c.	358	320	346	325	1349
5. ,,, of Heart, &c.	231	194	184	216	825
6. ,,, of Lungs, &c.	1022	789	454	1056	3321
7. ,,, of Stomach, &c.	147	238	355	171	911
8. ,,, of Kidneys, &c.	80	82	78	82	322
9. Childbirth, Diseases of Uterus, &c. .. .	28	22	15	22	87
10. Rheumatism, Diseases of the Joints, &c. ..	15	16	16	9	56
11. Diseases of the Skin, Cellular Tissue, &c. ..	7	9	19	12	47
12. Malformations	11	15	15	6	47
13. Premature Birth	78	95	89	98	360
14. Atrophy and Debility	151	219	271	169	810
15. Old Age	85	66	74	98	323
16. Privation, Cold, &c. .. . .	..	..	1	..	1
17. Inquests	218	241	213	284	956
Causes not specified	2	1	2	4	9
All Causes	3282	3445	3621	3571	13919
Total Zymotics	314	574	954	500	2342
Smallpox	6	1	..	2	9
Measles	44	111	73	45	273
Scarlatina	48	48	43	92	231
Whooping Cough	66	78	67	68	279
Diarrhoea	29	210	566	61	866
Fever { Typhus	12	9	12	11	44
{ Typhoid	24	34	77	86	221
{ Simple Continued .. . . .	..	..	3	1	4

The Registrars' Returns show that there were 22 deaths (14 of women and 8 of men) at the age of 90 and upwards, viz., 2 males and 5 females at 90, 2 males and 1 female at 91, 2 males and 2 females at 92, 2 males and 3 females at 93, 1 female at 95, 1 female at 96, and 1 female at 97.

ZYMOTICS.

This class of diseases occasioned 2,342 deaths during the year 1893, and accounted for 16·8 per cent. of the total mortality within the City during the same period. The average number of deaths from these diseases for the preceding ten years was 2,363, and the percentage death rate for 1893 was 0·3 per cent. less than the proportional rate of zymotic deaths to deaths from all causes during the preceding decennial period. The following table shows the localities and the periods of their fatal prevalence :—

WARDS, &c.	Deaths from all Causes.	ZYMOTICS.				Per Centage of Zymotic Deaths to Deaths from all Causes.	
		Quarters.					
		March.	June.	Sept.	Dec.		
Scotland	1383	31	72	138	46	20·7	
Vauxhall	189	2	8	9	2	11·1	
St. Paul's	149	..	3	5	7	10·0	
Exchange	153	..	5	7	5	11·1	
St. Anne's	429	6	18	18	17	13·7	
Lime Street	164	4	5	12	4	15·2	
Castle Street	12	..	..	..	..	..
St. Peter's	65	..	3	5	3	16·9	
Pitt Street	136	1	7	3	9	14·7	
Great George	199	3	12	19	10	22·1	
Rodney Street	309	4	10	18	10	13·6	
Abercromby	292	6	15	19	5	15·4	
Everton	2577	85	146	222	94	21·2	
Kirkdale	1422	39	78	129	54	21·1	
West Derby	1601	40	74	118	54	17·8	
North Toxteth	1256	19	26	66	48	12·6	
South Toxteth	860	11	31	63	23	14·8	
Liverpool Workhouse Hospital	1207	15	12	39	25	7·5	
Royal Infirmary	261	1	..	4	1	2·3	
Children's Infirmary	101	2	1	2	3	7·9	
Lying-in Hospital	10	..	..	..	..	..
Hahnemann Hospital	24	..	..	2	..	8·3
Consumption Hospital	17	..	..	..	..	..
North Hospital	157	2	1	2	..	3·2	
Hospital for Women	18	..	..	..	..	..
Stanley Hospital	66	2	1	2	..	7·6	
Royal South Hospital	242	..	5	7	6	7·4	
West Derby Union Hospital	409	3	3	7	9	5·3	
City Hospital North, Netherfield Road * ..	82	16	19	19	16	85·3	
City Hospital South, Grafton Street * ..	91	15	14	12	34	82·4	
City Hospital, Park Hill *	38	7	5	7	15	89·4	
City	13919	314	574	954	500	16·8	

* These Hospitals are for the treatment of Infectious Diseases. See pages 71 and 72.

FEVER.

Deaths from various forms of Fever occurred as given in the following table.
(The average number of deaths for the preceding ten years was 208.)

WARDS.	QUARTERS.												YEAR.				
	March			June.			Sept.			Dec.							
	Typhus.	Typhoid.	Simple cont'd.	Typhus.	Typhoid.	Simple cont'd.	Typhus.	Typhoid.	Simple cont'd.	Typhus.	Typhoid.	Simple cont'd.	Typhus.	Typhoid.	Simple cont'd.	TOTAL	
Scotland .. { Below 5 years	1	1	1	1	
	Above 5 years ..	2	.	.	3	.	3	.	2	6	.	2	14	.	16		
Vauxhall .. { Below 5 years ..	.	.	.	.	.	.	.	1	.	.	.	1	.	.	1
	Above 5 years ..	.	.	.	.	.	.	.	.	.	.	.	.	.	.
St. Paul's .. { Below 5 years ..	.	.	.	.	1	.	.	.	.	.	.	1	.	.	1
	Above 5 years ..	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Exchange .. { Below 5 years ..	.	.	.	.	1	.	.	.	.	1	.	2	.	.	2
	Above 5 years ..	.	.	.	.	.	.	.	.	1	.	1	.	.	1
St. Anne's .. { Below 5 years ..	.	.	.	.	.	.	.	1	.	1	.	2	.	.	2
	Above 5 years ..	.	.	.	.	.	.	.	.	1	.	2	.	.	1
Lime Street .. { Below 5 years ..	.	.	.	1	.	.	.	.	.	.	.	1	.	.	1
	Above 5 years ..	1	.	.	.	.	.	.	.	.	.	.	.	.	.
Castle Street .. { Below 5 years ..	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	Above 5 years ..	.	.	.	.	.	.	.	.	.	.	.	.	.	.
St. Peter's .. { Below 5 years ..	.	.	.	.	.	.	.	1	.	1	.	2	.	.	2
	Above 5 years ..	.	.	.	.	.	.	.	.	1	.	2	.	.	2
Pitt Street .. { Below 5 years ..	.	.	.	.	.	1	.	.	.	.	.	1	.	.	1
	Above 5 years ..	.	.	.	.	.	.	.	.	.	.	1	.	.	1
Great George .. { Below 5 years ..	.	.	.	.	2	.	.	.	.	.	1	.	3	.	3
	Above 5 years ..	.	.	.	.	.	.	.	.	.	1	.	.	.	.
Rodney Street .. { Below 5 years ..	.	.	.	1	.	2	.	1	.	2	.	6	.	.	6
	Above 5 years ..	1	.	.	.	.	.	.	.	2	.	6	.	.	6
Abercromby .. { Below 5 years ..	.	.	.	.	1	.	.	1	.	1	.	1	.	.	1
	Above 5 years ..	.	.	.	.	.	.	.	1	.	1	2	.	.	3
Everton .. { Below 5 years ..	.	1	.	.	1	.	.	1	.	1	.	4	.	.	4		
	Above 5 years ..	2	3	.	1	3	.	1	9	1	7	5	22	1	28		
Kirkdale .. { Below 5 years ..	1	.	.	.	1	.	.	1	.	1	.	4	.	.	4		
	Above 5 years ..	1	.	.	1	.	.	10	.	6	.	18	.	.	18		
West Derby .. { Below 5 years ..	.	.	.	.	.	.	1	.	.	.	1	.	.	1	.
	Above 5 years ..	1	2	.	.	4	.	4	.	5	.	15	.	.	16		
North Toxteth .. { Below 5 years ..	1	.	.	.	3	.	3	.	8	.	1	2	.	.	2		
	Above 5 years ..	1	1	.	.	.	.	.	1	.	15	.	.	15	.
South Toxteth .. { Below 5 years ..	.	.	.	.	.	.	.	4	.	.	7	.	.	7	.
	Above 5 years ..	2	.	.	1	.	.	2	.	.	2	.	.	4	.		
Hospitals .. { Below 5 years ..	.	.	.	1	.	2	.	1	7	44	.	32	96	1	129
	Above 5 years ..	8	8	.	8	8	.	9	36	1	7	44	.	32	96	1	
City { Below 5 years ..	3	.	.	3	.	2	3	1	..	4	1	2	13	2	17		
	Above 5 years ..	12	21	.	9	31	.	10	74	2	11	82	.	42	208	2	252

DEATHS FROM FEVER DURING THE YEAR 1893.

In arranging this Table, all Deaths occurring in Hospitals, have been transferred to the Wards from whence the patients came.

List of Streets in the City wherein Deaths from TYPHUS occurred during the Year 1893.

STREETS.	HOUSES.		Total.	STREETS.	HOUSES.		Total.
	Front.	Court.			Front.	Court.	
Arkwright ..	1	..	1	Elias	2	..	2
Ascot ..	4	..	4	Everton Valley ..	1	..	1
Back Lime ..	1	..	1	Garden Lane	1	..	1
Beatrice ..	2	..	2	Gilead	1	..	1
Benledi ..	1	..	1	Grove	1	..	1
Bismarck ..	1	..	1	Hankin	1	..	1
Blenheim ..	..	1	1	Hornby .. .. ..	..	1	1
Braemar ..	3	..	3	Oliver	1	..	1
Buckingham ..	1	..	1	Pimhill	1	..	1
Burlington ..	1	1	2	Rose Vale .. .. ..	..	1	1
Burroughs Gardens ..	..	1	1	Thomson	2	..	2
Bute ..	1	..	1	Webster	1	..	1
China ..	1	..	1	Westminster Road ..	1	..	1
Collingwood ..	..	1	1	Westmoreland .. ..	..	1	1
Douro ..	..	1	1				

List of Streets in the City wherein Two or more Deaths from TYPHOID FEVER occurred during the Year 1893.

STREETS.	HOUSES.		Total.	STREETS.	HOUSES.		Total.
	Front.	Court.			Front.	Court.	
Afram ..	..	2	2	Parr	1	1	2
Beresford ..	2	..	2	Prince Edwin .. ..	..	3	3
Burlington ..	2	..	2	Soho Square	2	..	2
Combermere ..	2	..	2	St. George's Hill ..	2	..	2
Connaught Road ..	2	..	2	Upper Warwick ..	2	..	2
Foley ..	2	..	2	Vauxhall Road ..	3	..	3
Hughson ..	2	..	2	Vere	2	..	2
Park Lane ..	2	..	2	Westminster Road ..	6	..	6

In arranging the foregoing lists of streets, all deaths occurring in Hospitals, have been transferred to the streets from whence the patients were removed.

SCARLATINA.

This disease became epidemic last Autumn, and continued during the whole of the year, increasing in virulence and extent as the year advanced. The number of cases coming under the notice of the Medical Officer in January was 172, which increased monthly and reached the maximum in October with 578 cases. Of the 3,538 cases reported, 1,380 were removed to hospital. The number of deaths was 231, or 6·5 per cent. (The average number of deaths for the preceding ten years was 274).

In the previous year, 1892, the number of cases reported was 1,554, of which 603 were removed to hospital; and the deaths were 131, a percentage of 8·04.

DEATHS FROM SCARLATINA.

WARDS.		QUARTERS.								YEAR.			
		March.		June.		Sept.		Dec.					
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total.	
Scotland	..	{ Below 5 years ..	2	1	1	2	3	3	3	2	9	8	17
		{ Above 5 years ..	1	1	2	1	..	..	1	..	4	2	6
Vauxhall	..	{ Below 5 years ..	..	..	..	..	..	..	1	..	1	..	1
		{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
St. Paul's	..	{ Below 5 years ..	..	..	..	..	..	..	1	..	..	1	1
		{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
Exchange	..	{ Below 5 years ..	..	..	..	..	..	..	1	..	1	..	1
		{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
St. Anne's	..	{ Below 5 years ..	..	..	..	..	..	..	1	..	..	1	1
		{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
Lime Street	..	{ Below 5 years ..	..	..	..	..	..	..	..	..	..	..	..
		{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
Castle Street	..	{ Below 5 years ..	..	..	..	..	..	..	..	..	..	..	..
		{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
St. Peter's	.	{ Below 5 years ..	..	..	..	..	..	..	..	..	..	..	..
		{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
Pitt Street	..	{ Below 5 years ..	..	..	1	..	..	..	..	..	1	1	2
		{ Above 5 years ..	..	..	1	..	..	..	1	..	..	..	..
Great George	..	{ Below 5 years ..	..	..	..	..	..	..	..	..	1	..	1
		{ Above 5 years ..	..	..	..	1	..	..	..	..	1	..	2
Rodney Street.	..	{ Below 5 years ..	..	..	..	..	..	..	..	1	..	..	1
		{ Above 5 years ..	..	..	..	..	..	..	..	1	..	..	1
Abercromby	..	{ Below 5 years ..	..	..	..	1	..	..	..	1	..	1	1
		{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
Everton	..	{ Below 5 years ..	3	1	2	2	3	2	9	6	17	11	28
		{ Above 5 years ..	..	3	..	..	..	..	2	3	2	6	8
Kirkdale	..	{ Below 5 years ..	4	1	1	2	..	..	2	7	7	10	17
		{ Above 5 years ..	2	3	..	..	..	..	..	3	2	6	8
West Derby	..	{ Below 5 years ..	2	2	..	..	3	2	2	5	7	9	16
		{ Above 5 years ..	..	1	..	..	..	1	..	2	..	4	4
North Toxteth	..	{ Below 5 years ..	..	1	2	..	3	3	2	2	3	4	7
		{ Above 5 years ..	..	..	..	2	1	..	2	2	..	2	8
South Toxteth	..	{ Below 5 years ..	2	..	2	1	1	..	1	1	6	2	2
		{ Above 5 years ..	..	..	..	..	1	..	1	..	2	..	2
Hospitals	..	{ Below 5 years ..	7	2	10	5	5	6	8	11	30	24	54
		{ Above 5 years ..	6	2	6	4	1	1	4	6	17	13	30
City	..	{ Below 5 years ..	20	9	18	13	18	18	31	34	87	74	161
		{ Above 5 years ..	9	10	10	7	3	4	10	17	32	38	70

List of Streets in the City wherein Two or more Deaths from
Scarlatina occurred during the Year 1893.

STREETS.	HOUSES.			Total	STREETS.	HOUSES.			Total
	Front	Court.				Front.	Court.		
Aberdeen	2	..	2	2	Laxey	1	1	2	2
Adelaide	2	..	2	2	Louisa	3	..	3	3
Back Claremont	2	..	2	2	Nesfield	2	..	2	2
Beaufort	2	..	2	2	Paget	1	1	2	2
Bond	1	1	2	2	Palmerston	2	..	2	2
Buckingham	2	..	2	2	Paton	2	..	2	2
Burlington	2	1	3	3	Pelops	2	..	2	2
Cleopas	2	..	2	2	Roscoe Lane	2	2	4	4
Furlong	3	..	3	3	Stanley Road	2	..	2	2
Gelling	2	..	2	2	Solon	2	..	2	2
Grafton	1	1	2	2	Tagus	2	..	2	2
Gt. Newton	2	..	2	2	Tatlock	3	..	3	3
Haddock	2	..	2	2	Walton Lane	2	..	2	2
Hook	2	..	2	2	Warwick	2	..	2	2
Hopwood .. .. ..	..	..	2	2					

In arranging the foregoing list of streets, all deaths occurring in Hospitals, have been transferred to the streets from whence the patients were removed,

MEASLES.

Measles occasioned 273 deaths. (The average number of deaths for the preceding ten years was 501.)

WARDS.	QUARTERS.								YEAR.			
	March.		June.		Sept.		Dec.					
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total.	
Scotland ..	{ Below 5 years ..	3	1	6	8	6	3	1	..	16	12	28
	{ Above 5 years ..	1	1	..	..	..	..	..	..	1	1	2
Vauxhall ..	{ Below 5 years ..	..	..	2	3	..	..	..	..	2	3	5
	{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
St. Paul's ..	{ Below 5 years ..	..	..	..	..	..	..	..	..	..	..	..
	{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
Exchange ..	{ Below 5 years ..	..	..	..	..	..	..	..	..	..	..	..
	{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
St. Anne's ..	{ Below 5 years ..	..	..	2	4	..	..	1	..	3	4	7
	{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
Lime Street ..	{ Below 5 years ..	..	1	1	2	..	..	..	..	1	3	4
	{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
Castle Street ..	{ Below 5 years ..	..	..	..	..	..	..	..	..	..	..	..
	{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
St. Peter's ..	{ Below 5 years ..	..	..	..	..	1	..	2	..	3	..	3
	{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
Pitt Street ..	{ Below 5 years ..	..	..	..	..	1	..	..	2	1	2	3
	{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
Great George ..	{ Below 5 years ..	..	..	..	1	1	2	4	2	5	5	10
	{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
Rodney Street ..	{ Below 5 years ..	..	..	..	1	1	..	..	2	1	3	4
	{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
Abercromby ..	{ Below 5 years ..	..	1	2	..	2	1	..	..	4	2	6
	{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
Everton ..	{ Below 5 years ..	9	4	16	23	7	6	5	3	37	36	73
	{ Above 5 years ..	..	..	1	..	..	..	..	..	1	..	1
Kirkdale ..	{ Below 5 years ..	4	5	11	13	11	13	3	2	29	33	62
	{ Above 5 years ..	..	..	2	..	1	..	..	1	3	1	4
West Derby ..	{ Below 5 years ..	2	2	6	4	2	8	4	4	14	18	32
	{ Above 5 years ..	..	..	2	..	1	1	..	..	3	1	4
North Toxteth ..	{ Below 5 years ..	..	..	..	..	1	1	2	2	3	3	6
	{ Above 5 years ..	..	..	..	..	1	..	..	1	1	1	2
South Toxteth ..	{ Below 5 years ..	2	..	..	..	1	1	1	..	4	1	5
	{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
Workhouses and Hospitals ..	{ Below 5 years ..	3	5	1	..	..	..	1	2	5	7	12
	{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
City ..	{ Below 5 years ..	23	19	47	59	34	35	24	19	128	132	260
	{ Above 5 years ..	1	1	5	..	3	1	..	2	9	4	13

DIARRHŒA.

Diarrhœa accounted for 866 deaths. (The average number of deaths for the preceding ten years was 540.)

WARDS.		QUARTERS.								YEAR.			
		March.		June.		Sept.		Dec.					
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total.	
Scotland	{ Below 5 years ..	1	1	15	16	41	48	2	3	59	68	127
		{ Above 5 years ..	..	1	..	1	2	7	2	1	4	10	14
Vauxhall	{ Below 5 years ..	1	..	1	1	3	2	..	..	5	3	8
		{ Above 5 years ..	..	..	..	..	..	..	1	..	1	..	1
St. Paul's	{ Below 5 years ..	..	..	2	..	2	2	1	..	5	2	7
		{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
Exchange	{ Below 5 years ..	..	..	..	..	1	3	..	1	1	4	5
		{ Above 5 years ..	..	..	..	..	1	1	..	..	1	1	2
St. Anne's	{ Below 5 years ..	..	..	1	7	4	8	2	2	7	17	24
		{ Above 5 years ..	..	1	1	..	..	1	..	1	1	3	4
Lime Street	{ Below 5 years ..	1	..	..	..	4	3	..	1	5	4	9
		{ Above 5 years ..	..	..	..	..	1	..	..	1	..	..	1
Castle Street	{ Below 5 years ..	..	..	..	..	..	..	..	..	..	..	..
		{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
St. Peter's	{ Below 5 years ..	..	..	..	..	1	2	1	..	..	2	2
		{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
Pitt Street	{ Below 5 years ..	..	..	..	..	2	..	..	..	..	2	2
		{ Above 5 years ..	..	..	..	..	..	1	..	..	..	1	1
Great George	{ Below 5 years ..	..	..	3	2	5	5	..	..	8	7	15
		{ Above 5 years ..	..	..	1	1	2	1	..	..	3	2	5
Rodney Street	{ Below 5 years ..	1	..	..	..	4	3	..	..	5	3	8
		{ Above 5 years ..	..	..	..	..	1	1	..	1	1	2	3
Abercromby	{ Below 5 years ..	..	..	3	1	4	6	..	..	7	7	14
		{ Above 5 years ..	..	..	..	..	1	1	..	..	1	1	2
Everton	{ Below 5 years ..	4	7	31	31	75	67	7	5	117	110	227
		{ Above 5 years ..	..	..	..	..	1	7	4	1	..	8	5
Kirkdale	{ Below 5 years ..	..	..	19	13	35	30	2	4	56	47	103
		{ Above 5 years ..	1	..	..	..	2	2	3	2	6	4	10
West Derby	{ Below 5 years ..	..	1	12	17	28	30	..	4	40	52	92
		{ Above 5 years ..	1	1	..	2	2	5	..	..	3	8	11
North Toxteth	{ Below 5 years ..	..	1	2	3	19	19	3	..	24	23	47
		{ Above 5 years ..	1	..	..	1	2	4	..	..	3	5	8
South Toxteth	{ Below 5 years ..	..	1	6	7	21	15	3	1	30	24	54
		{ Above 5 years ..	..	..	..	1	3	3	1	1	4	5	9
Workhouses and Hospitals ..		{ Below 5 years ..	1	2	1	2	1	3	..	..	3	7	10
		{ Above 5 years ..	..	1	1	..	5	13	3	3	9	17	26
City	{ Below 5 years ..	9	13	96	103	249	245	20	21	374	382	756
		{ Above 5 years ..	3	4	3	8	29	43	10	10	45	65	110

List of Streets in the City wherein Three or more Deaths from
Diarrhoea occurred during the Year 1893.

STREETS.	HOUSES.		Total.	STREETS.	HOUSES.		Total.
	Front.	Court.			Front.	Court.	
Abbey	3	..	3	Lancaster	4	..	4
Addison	2	1	3	Latimer	2	1	3
Ascot	4	..	4	Limekiln Lane	2	1	3
Athol	4	..	4	Mann	5	2	7
Aubrey	3	..	3	Netherfield Road North.	4	..	4
Barmouth	3	..	3	Northumberland	4	2	6
Beacon	3	..	3	Penrhyn .. .. ..	..	4	4
Beatrice	4	1	5	Penrose	6	..	6
Beaufort	5	..	5	Portland	4	..	4
Bevington	3	..	3	Prince Edwin	3	..	3
Boundary	2	2	4	Priory	3	..	3
Braemar	3	..	3	Queen's Road	3	..	3
Breck Road	3	..	3	Raymond	3	1	4
Burlington	5	5	10	Richmond Row	2	2	4
China	4	..	4	Robsart	3	..	3
Clare .. ..	..	3	3	Scotland Road	3	..	3
Dryden	1	2	3	Silvester	1	2	3
Duke	3	..	3	Slade	1	2	3
Elias	6	..	6	Stitt	3	..	3
Ellison	3	..	3	Tagus	3	..	3
Flinders	3	..	3	Tatlock	1	2	3
Fontenoy	3	1	4	Tillard	3	..	3
Ford	2	1	3	Tudor	4	..	4
Gordon	3	..	3	Ullswater	3	..	3
Gt. Homer	3	1	4	Upper Frederick	4	..	4
Haigh	5	..	5	Victoria Square	4	..	4
Hartnup	3	..	3	Willoughby	3	..	3
Hopwood	3	2	5	Woodstock .. .. ..	..	3	3
Iliad	4	..	4	Wyatt	3	..	3
Lamb	3	..	3				

WHOOPING COUGH.

Whooping Cough occasioned 279 deaths. (The average number of deaths for the preceding ten years was 363.)

WARDS.	QUARTERS.								YEAR.			
	March.		June.		Sept.		Dec.					
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total.	
Scotland .. .	{ Below 5 years ..	4	5	6	4	3	6	5	5	18	20	38
	{ Above 5 years ..	..	..	..	..	..	1	..	..	..	1	1
Vauxhall .. .	{ Below 5 years ..	..	..	1	..	1	..	..	..	2	..	2
	{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
St. Paul's .. .	{ Below 5 years ..	..	..	..	..	..	..	..	2	..	2	2
	{ Above 5 years ..	..	..	..	..	..	..	1	..	1	..	1
Exchange .. .	{ Below 5 years ..	..	..	1	1	..	..	..	..	1	1	2
	{ Above 5 years ..	..	..	..	..	..	1	..	..	1	..	1
St. Anne's .. .	{ Below 5 years ..	3	1	..	..	..	..	..	2	3	3	6
	{ Above 5 years ..	..	..	..	..	..	1	..	..	..	1	1
Lime Street .. .	{ Below 5 years ..	..	..	..	..	2	1	2	..	4	1	5
	{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
Castle Street .. .	{ Below 5 years ..	..	..	..	..	..	..	..	..	..	..	..
	{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
St. Peter's .. .	{ Below 5 years ..	..	..	..	..	..	..	..	..	..	..	..
	{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
Pitt Street .. .	{ Below 5 years ..	..	..	..	..	1	..	..	2	3	2	6
	{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
Great George .. .	{ Below 5 years ..	1	1	..	..	..	..	..	..	1	1	2
	{ Above 5 years ..	..	..	..	..	..	1	..	..	1	..	1
Rodney Street .. .	{ Below 5 years ..	..	..	1	2	2	2	..	..	3	4	7
	{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
Abercromby .. .	{ Below 5 years ..	1	1	2	2	..	1	..	..	3	4	7
	{ Above 5 years ..	..	..	..	..	..	1	..	..	1	..	1
Everton .. .	{ Below 5 years ..	10	13	11	6	3	7	7	5	31	31	62
	{ Above 5 years ..	..	..	2	3	..	..	..	..	2	3	5
Kirkdale .. .	{ Below 5 years ..	3	7	4	4	5	5	3	6	15	22	37
	{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
West Derby .. .	{ Below 5 years ..	1	6	7	5	3	4	3	5	14	20	34
	{ Above 5 years ..	1	..	..	..	1	..	..	..	2	..	2
North Toxteth .. .	{ Below 5 years ..	4	3	3	4	2	2	1	7	10	16	26
	{ Above 5 years ..	..	1	..	..	..	..	..	1	..	2	2
South Toxteth .. .	{ Below 5 years ..	..	..	3	4	5	3	4	1	12	8	20
	{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
Workhouses and Hospitals .. .	{ Below 5 years ..	..	..	..	1	3	1	2	1	5	3	8
	{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
City .. .	{ Below 5 years ..	27	37	39	34	29	32	29	37	124	140	264
	{ Above 5 years ..	1	1	2	3	4	2	1	1	8	7	15

DIPHTHERIA.

The number of deaths (47) from this disease was 35 below the average of the preceding ten years (1883 to 1892), and 7 below the average for the ten years 1872 to 1881.

DEATHS FROM DIPHTHERIA.

WARDS.		QUARTERS.								YEAR.		
		March.		June.		Sept.		Dec.				
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total.
Scotland	{ Below 5 years ..	..	..	..	..	..	..	2	..	2
		..	{ Above 5 years ..	..	..	..	..	..	..	..	..	..
Vauxhall	{ Below 5 years ..	..	..	..	1	..	..	1	..	1
		..	{ Above 5 years ..	..	..	..	..	..	..	..	..	..
St. Paul's	{ Below 5 years ..	..	..	..	..	..	1	1	1	2
		..	{ Above 5 years ..	..	..	..	..	..	..	..	..	..
Exchange	{ Below 5 years ..	..	..	..	..	..	..	..	..	..
		..	{ Above 5 years ..	..	..	..	..	..	..	1	..	1
St. Anne's	{ Below 5 years ..	..	..	..	..	..	..	1	..	1
		..	{ Above 5 years ..	..	..	..	..	..	..	..	..	..
Lime Street	{ Below 5 years ..	..	..	1	..	..	..	1	..	2
		..	{ Above 5 years ..	..	..	..	..	..	..	..	..	..
Castle Street	{ Below 5 years ..	..	..	..	..	..	..	..	..	..
		..	{ Above 5 years ..	..	..	..	..	..	..	..	..	..
St. Peter's	{ Below 5 years ..	..	..	..	..	..	..	..	..	..
		..	{ Above 5 years ..	..	..	..	..	..	..	..	..	..
Pitt Street	{ Below 5 years ..	..	..	..	..	..	..	..	..	..
		..	{ Above 5 years ..	..	..	..	..	..	..	..	..	..
Great George	{ Below 5 years ..	..	..	..	..	..	..	..	..	..
		..	{ Above 5 years ..	..	..	..	..	..	..	..	..	..
Rodney Street	..	.	{ Below 5 years ..	..	..	..	1	..	..	..	..	1
		.	{ Above 5 years ..	..	..	..	..	..	..	..	..	..
Abercromby	{ Below 5 years ..	..	..	..	..	..	..	..	..	..
		..	{ Above 5 years ..	..	..	..	..	..	..	..	..	..
Everton	{ Below 5 years ..	..	1	..	1	..	..	2	1	3
		..	{ Above 5 years ..	..	..	..	..	1	..	3	..	4
Kirkdale	{ Below 5 years ..	1	1	..	..	3	1	..	..	4
		..	{ Above 5 years ..	1	..	..	1	..	..	..	1	2
West Derby	{ Below 5 years ..	..	..	..	1	1	1	..	3	1
		..	{ Above 5 years ..	1	1	..	..	..	..	..	1	2
North Toxteth	{ Below 5 years ..	..	..	..	..	..	..	..	..	..
		..	{ Above 5 years ..	1	..	..	..	..	..	..	1	..
South Toxteth	{ Below 5 years ..	2	..	..	..	..	..	..	..	2
		..	{ Above 5 years ..	..	..	1	..	..	1	..	..	1
Hospitals	{ Below 5 years ..	..	..	..	..	1	1	2	..	3
		..	{ Above 5 years ..	..	..	..	..	..	1	..	2	..
City	{ Below 5 years ..	3	2	1	3	6	3	6	8	16
		..	{ Above 5 years ..	3	1	1	1	1	2	3	3	7

CROUP.

The deaths (38) from this disease were 90 below the average of the preceding ten years (1883 to 1892) and 134 lower than the average for the ten years 1872 to 1881.

DEATHS FROM CROUP.

WARDS.	QUARTERS.								YEAR.				
	March.		June.		Sept.		Dec.						
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total		
Scotland	{ Below 5 years ..	1	..	..	..	1	..	2	3	4	3	7
Vauxhall	{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
St. Paul's	{ Below 5 years ..	..	..	..	..	..	..	..	..	..	..	..
Exchange	{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
St. Anne's	{ Below 5 years ..	1	..	..	..	..	..	..	1	..	1	..
Lime Street	{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
Castle Street	{ Below 5 years ..	..	..	..	..	..	..	..	..	..	..	..
St. Peter's	{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
Pitt Street	{ Below 5 years ..	..	..	..	..	..	1	..	1	..	1	..
Great George	{ Above 5 years ..	..	..	..	..	..	1	..	..	..	1	1
Rodney Street	{ Below 5 years ..	..	..	..	..	..	..	..	..	..	..	..
Abercromby	{ Above 5 years ..	1	..	..	1	..	..	..	..	1	1	2
Everton	{ Below 5 years ..	1	..	..	..	1	..	..	2	2	2	4
Kirkdale	{ Above 5 years ..	1	1	..	..	..	..	..	1	1	2	2
West Derby	{ Below 5 years ..	..	1	1	..	1	1	1	1	3	3	6
North Toxteth	{ Above 5 years ..	..	..	..	..	..	..	1	..	1	..	1
South Toxteth	{ Below 5 years ..	..	..	..	..	..	..	..	..	..	..	..
Workhouses and Hospitals	{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
City	{ Below 5 years ..	5	3	1	3	5	3	7	6	18	15	33
		{ Above 5 years ..	1	1	..	1	..	..	2	..	3	2	5

OTHER ZYMATICS.

Under the term of other Zymotics are included :—Small Pox, Chicken Pox, Cholera, Dysentery, Influenza, Erysipelas, Syphilis, Thrush, Puerperal Fever, Rheumatic Fever, Quinsy, Purpura, and Ague.

TUBERCULAR DISEASES.

This group of diseases includes Phthisis, Scrofula, Tabes Mesenterica, and Hydrocephalus. They occasioned 1,731 deaths in the City of Liverpool during the year 1893. (The average number of deaths for the preceding ten years was 1,701.)

PHTHISIS.

The deaths from Phthisis amounted to 1,194, the average number for the preceding ten years being 1,208.

WARDS.	QUARTERS.								YEAR.				
	March.		June.		Sept.		Dec.						
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total.		
Scotland	{ Below 5 years ..	..	2	1	2	1	1	..	5	2	7	
	..	{ Above 5 years ..	7	18	12	13	10	4	11	17	40	52	92
Vauxhall	{ Below 5 years ..	..	..	..	..	..	..	..	..	..	..
	..	{ Above 5 years ..	4	3	..	1	1	..	..	1	5	5	10
St. Paul's	{ Below 5 years ..	..	..	..	..	..	..	..	..	..	..
	..	{ Above 5 years ..	2	2	2	1	..	3	1	1	5	7	12
Exchange	{ Below 5 years ..	..	..	..	..	..	..	..	..	..	..
	..	{ Above 5 years ..	4	..	1	2	3	..	1	..	9	2	11
St. Anne's	{ Below 5 years ..	..	..	..	..	..	..	..	..	..	..
	..	{ Above 5 years ..	2	10	7	3	3	1	3	4	15	18	33
Lime Street	{ Below 5 years ..	..	..	..	..	..	1	..	..	1	..	
	..	{ Above 5 years ..	2	1	..	3	4	1	..	3	6	8	14
Castle Street	{ Below 5 years ..	..	..	..	..	..	2	..	..	..	..
	..	{ Above 5 years ..	..	..	..	..	..	..	..	..	2	..	
St. Peter's	{ Below 5 years ..	..	..	..	..	..	..	..	..	..	..
	..	{ Above 5 years ..	..	..	..	..	1	..	..	1	..	1	
Pitt Street	{ Below 5 years ..	..	..	..	..	..	..	1	..	..	1	
	..	{ Above 5 years ..	1	4	2	1	1	1	2	..	6	6	12
Great George	{ Below 5 years ..	..	..	..	..	..	..	..	..	..	..
	..	{ Above 5 years ..	3	2	1	1	..	2	2	..	6	5	11
Rodney Street	{ Below 5 years ..	..	..	..	1	..	..	..	..	1	..	
	..	{ Above 5 years ..	1	7	4	3	1	..	4	1	10	11	21
Abercromby	{ Below 5 years ..	..	..	..	1	1	..	..	..	1	1	2
	..	{ Above 5 years ..	4	5	3	2	2	3	2	3	11	13	24
Everton	{ Below 5 years ..	..	..	..	2	..	..	1	1	..	1	4
	..	{ Above 5 years ..	22	19	24	16	21	14	22	25	89	74	163
Kirkdale	{ Below 5 years ..	..	..	..	1	1	..	1	..	2	1	3
	..	{ Above 5 years ..	15	7	10	9	16	9	10	10	51	35	86
West Derby	{ Below 5 years ..	1	1	..	..	..	..	1	..	2	1	3
	..	{ Above 5 years ..	13	16	17	17	11	9	18	15	59	57	116
North Toxteth	{ Below 5 years ..	1	..	..	..	..	3	..	1	1	4	5
	..	{ Above 5 years ..	16	13	10	14	14	12	13	11	53	50	103
South Toxteth	{ Below 5 years ..	..	1	..	2	3	..	..	1	3	4	7
	..	{ Above 5 years ..	12	6	2	7	8	3	6	7	28	23	51
Workhouses and Hospitals	{ Below 5 years ..	..	..	1	..	1	2	1	..	3	2	5
	..	{ Above 5 years ..	67	26	79	30	55	29	66	40	267	125	392
City	{ Below 5 years ..	2	2	6	5	9	8	5	2	22	17	39
	..	{ Above 5 years ..	175	139	174	124	152	91	162	138	663	492	1155

DEATHS FROM THE OTHER TUBERCULAR DISEASES.

WARDS.		QUARTERS.								YEAR.		
		March.		June.		Sept.		Dec.				
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total.
Scotland ..	..	2	5	9	5	3	1	6	2	20	13	33
	{ Below 5 years ..	1	..	2	1	4	1	1	1	8	3	11
Vauxhall ..	..	1	..	1	..	1	..	..	..	3	..	3
	{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
St. Paul's ..	..	..	{ Below 5 years ..	..	..	2	..	..	1	..	1	2
	{ Above 5 years ..	..	1	..	..	..	..	..	1	..	3	3
Exchange ..	..	..	{ Below 5 years ..	..	..	..	..	..	..	..	..	..
	{ Above 5 years ..	..	..	..	..	2	..	..	..	..	2	2
St. Anne's ..	..	1	2	3	4	2	2	..	4	6	12	18
	{ Below 5 years ..	..	..	..	..	..	..	1	..	1	..	1
	{ Above 5 years ..	..	..	..	..	..	..	..	..	4	4	8
Lime Street ..	..	..	{ Below 5 years ..	..	2	2	..	2	2	..	..	..
	{ Above 5 years ..	..	1	..	..	1	..	..	..	1	1	2
Castle Street ..	..	..	{ Below 5 years ..	..	..	..	..	..	..	..	..	..
	{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
St. Peter's ..	..	..	{ Below 5 years ..	..	..	1	..	..	..	..	1	..
	{ Above 5 years ..	..	..	..	..	1	1	..	1	..	2	1
Pitt Street ..	..	..	{ Below 5 years ..	..	..	..	..	..	..	..	..	..
	{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
Great George ..	..	..	{ Below 5 years ..	..	..	..	..	2	1	..	1	2
	{ Above 5 years ..	..	..	..	..	..	1	..	..	..	..	1
Rodney Street ..	..	1	1	..	3	4	1	1	2	6	7	13
	{ Below 5 years ..	..	..	..	1	..	..	..	..	1	1	2
Abercromby ..	..	..	{ Below 5 years ..	..	2	1	2	2	1	..	2	3
	{ Above 5 years ..	..	..	..	..	..	..	..	..	..	..	..
Everton ..	..	12	14	10	12	12	20	10	12	44	58	102
	{ Below 5 years ..	5	3	1	2	4	4	1	..	11	9	20
Kirkdale ..	..	4	8	9	7	15	7	3	3	31	25	56
	{ Above 5 years ..	..	5	5	1	4	1	3	4	12	11	23
West Derby ..	..	7	5	8	12	9	8	5	4	29	29	58
	{ Below 5 years ..	5	2	1	1	2	..	1	..	9	3	12
North Toxteth ..	..	4	5	7	2	6	5	11	..	28	12	40
	{ Below 5 years ..	..	2	1	3	2	..	2	1	5	6	11
South Toxteth ..	..	3	..	2	1	5	6	3	..	13	7	20
	{ Below 5 years ..	1	..	..	..	2	..	1	..	4	..	4
Workhouses and Hospitals ..	..	5	3	4	5	1	..	4	1	12	9	21
	{ Below 5 years ..	9	6	12	6	9	5	2	1	32	18	50
City ..	..	38	47	57	55	63	55	46	30	204	187	391
	{ Below 5 years ..	22	19	23	18	29	12	13	10	87	59	146

Mr. Plummer has kindly supplied the following tables:—

LIVERPOOL OBSERVATORY, BIDSTON, BIRKENHEAD.

Latitude $53^{\circ} 24' 4''$ N.; Longitude $3^{\circ} 4' 17''$ W.

Height above the Mean Level of the Sea, 201 feet.

Year and Month, 1893.	Barometer. Mean.	Temperature. Mean.	Rainfall. Amount.	No. of days on which 0·01 ins. or more rain fell.	Mean Monthly Humidity. Complete Satura- tion equal 100.
January.....	Inches. 30·057	Degrees. 37·5	Inches. 1·467	20	90
February.....	29·633	41·2	2·873	21	84
March.....	30·093	46·5	0·531	9	73
April.....	30·172	51·0	0·500	4	69
May.....	30·054	55·5	1·657	14	72
June.....	29·995	61·2	1·545	8	70
July.....	29·879	61·9	3·136	16	72
August.....	29·981	63·7	2·336	17	75
September.....	29·827	56·0	3·401	18	77
October.....	29·840	51·2	2·640	18	78
November.....	30·017	42·3	1·420	17	83
December.....	29·895	42·6	3·031	19	84

DIFFERENCES FROM THE AVERAGE QUANTITIES OBSERVED DURING THE LAST 20 YEARS.

1893.	BAROMETER.		TEMPERATURE.		RAINFALL.	
	Above Average.	Below Average.	Above Average.	Below Average.	Above Average.	Below Average.
January.....	Inches. 0·136	Inches. ..	Degrees. ..	Degrees. 1·7	Inches. ..	Inches. 0·693
February.....	..	0·323	0·0	..	1·294	..
March.....	0·183	..	4·2	..	..	1·154
April.....	0·290	..	3·7	..	..	1·140
May.....	0·108	..	3·7	..	..	0·246
June.....	0·008	..	3·7	..	..	0·452
July.....	..	0·041	1·1	..	0·143	..
August.....	0·071	..	3·2	..	..	0·569
September.....	..	0·100	..	0·2	0·143	..
October.....	..	0·030	1·7	..	..	0·859
November.....	0·147	..	..	0·9	..	1·499
December.....	0·017	..	2·7	..	0·388	..

OBSERVATIONS OF VELOCITY OF WIND.

1893.	Average Hourly Velocity for Month.	Maximum Hourly Velocity.	Date of Maximum Velocity.	Minimum Hourly Velocity.	Date of Minimum Velocity.
	Miles per hr.	Miles.		Miles.	
January.....	18·8	45	Jan. 20	1	Jan. 14, 15
February.....	20·6	64	Feb. 10	1	Feb. 3, 25
March.....	18·7	57	March 2	0	March 18
April.....	13·5	41	April 30	1	April 3
May.....	14·0	33	May 7	1	May 3, 4
June.....	13·9	47	June 23	1	June 2
July.....	15·8	41	July 17	1	July 4, 12
August.....	15·7	50	Aug. 4	1	Aug. 14
September.....	17·2	44	Sept. 23	1	Sept. 4
October.....	16·9	50	Oct. 26	0	Oct. 18
November.....	19·7	49	Nov. 18	1	Nov. 14
December.....	19·2	50	Dec. 10	1	Dec. 28

LIVERPOOL SANITARY AMENDMENT ACT, 1864.

Under the provisions of the above Act, the Medical Officer of Health delivered to the Town Clerk reports during the year, certifying that the following premises were unfit for human habitation, and ought to be demolished. These reports were laid before the Council, and referred to the Insanitary Property Committee to be dealt with.

The dwelling-house numbered 41 in Warwick Street, and 31 in Henderson Street, in the City of Liverpool.

The court known as No. 13 court in ADDISON STREET, in the City of Liverpool.

The dwelling-house numbered 2 in the said No. 13 court.

The City Engineer has kindly supplied the following tables:—

INSANITARY PROPERTY.

Insanitary Property purchased 1893.				Insanitary Property demolished 1893.			
No. of houses included in tenth presentment.	No. of houses included in eleventh presentment.	No. of houses purchased by Insanitary Property Committee included in presentments referred by Council to Committee.	Total.	No. of houses included in tenth presentment.	No. of houses included in eleventh presentment.	No. of houses demolished by Insanitary Property Committee included in presentments referred by Council to Committee.	Total.
5	110	4	119	5	317	1	323

RETURN OF HOUSES ERECTED AND HOUSES TAKEN DOWN DURING YEAR 1893.

	WARDS.						Houses Erected.	Houses taken down.
1	Everton and Kirkdale..	..	..	..	..	..	55	56
2	Scotland	..	..	..	..	..	9	219
3	Vauxhall	..	..	..	..	..	28	84
4	St. Paul's	..	..	..	..	..	20	1
5	Exchange	..	..	..	..	..	..	3
6	Castle Street	..	..	..	..	..	1	1
7	St. Peter's	..	..	..	..	..	..	..
8	Pitt Street	..	..	..	..	..	..	4
9	Great George	..	..	..	..	..	..	6
10	Rodney	..	..	..	..	..	..	..
11	Abercromby	..	..	..	..	..	..	..
12	Lime Street	..	..	..	..	..	1	..
13	St. Anne's	..	..	..	..	..	..	28
14	West Derby	..	..	..	..	..	152	7
15	South Toxteth	..	..	..	..	..	61	14
16	North Toxteth	..	..	..	..	..	6	102
Total number of houses erected and } taken down in City }							333	525

SEWER VENTILATION TO END OF 1893.

No. of 6-inch Iron Pipe Ventilating Shafts	..	..	..	..	873
No. of Street Ventilating Gratings	.	..	..	..	4,774
The length of Old Sewers Ventilated	.	..	..	..	180 miles.

NOTE.—All New Sewers are ventilated as constructed.

LODGING-HOUSES.

For the purposes of the inspection and registering of lodging-houses, sub-let houses, canal boats, and bakehouses, the registration of dairies, cowsheds and milk shops, a staff consisting of one Chief Inspector, ten Inspectors for lodging-houses, one for canal boats, one for bakehouses, two for disinfection, and one for milk shops is provided.

The number of common lodging-houses is gradually diminishing, and thus a false impression might be created that the migratory classes were diminishing. The contrary is, however, the case both with men and women, the common lodging-houses being superseded by what are called model lodging-houses. The amount of accommodation provided in the model lodging-houses is shewn in the following table :—

FOR MEN ONLY.

103 model lodging-houses are registered to accommodate 197 members of the keepers' families and 5,303 lodgers.

FOR WOMEN ONLY.

14 are registered to accommodate 15 members of the keepers' families and 414 lodgers.

92 informations were laid against the keepers of the lodging-houses for breaches of the Byelaws, and 1,889 against tenants of sub-let houses.

The following informations were laid against the Keepers of Lodging Houses :—

Not sweeping floors.....	48
Not washing floors	9

Sub-let Houses :—

Not sweeping floors	417
Not washing floors	493

There were on the register 817 lodging-houses at the end of 1892, and 781 at the end of 1893. This difference was occasioned by the removal of 238 old licences, and the addition of 202 new ones. The visits to lodging-houses are both by day and night. The lodging-houses of the better class, and especially those provided with only single beds for each person, and only with the number of beds equivalent to the number of lodgers allowed, are not visited at night except on grave suspicion or on complaint, or in the case of foreign emigrant lodging houses. The night visits are pretty nearly restricted to the low districts and tramp houses. The number of day visits paid during the year was 34,831, and the night visits 5,056. The number of lodging-houses found overcrowded on the night visits was 18, the number of informations laid for breaches of the bye-laws was 92, with the results of fines in 90 cases to the extent of £20 5s. 0d., in sums varying from 1s. to 20s. and costs, and 2 acquitted. The number of lodging-houses found dirty was 120 ; notices were served to lime-wash and cleanse.

It is necessary frequently to visit houses which are not licensed either as lodging or sub-let houses, especially when emigration is brisk or at race times. There were 1,230 such visits paid during the day, and in 32 of the cases where suspicion was confirmed they were followed up by night visits. A tenant harbouring lodgers is not taken before the Justices for the first offence, but is noticed to apply to have his rooms measured and licensed. There were 133 such notices issued during the year, but in only 5 cases did the tenants refuse to comply ; they were brought before the Justices and fined. A bye-law

requires that every case of infectious sickness in a lodging-house should be at once reported to the Medical Officer of Health. 12 cases of fever occurred in lodging-houses ; 9 of the patients were at once sent to hospital, the remaining 3, being members of the keepers' families, were not removed ; 5 cases of Smallpox occurred in lodging-houses and were all removed to hospital. In all cases of fever or infectious disease, the bedding was removed to the disinfecting apparatus and the rooms purified and cleansed. There were 65 deaths from non-contagious diseases in lodging-houses, of which 37 belonged to the keepers' families and 28 were lodgers.

SEAMEN'S LICENSED LODGING HOUSES.

The Corporation have made bye-laws, with the sanction of the President of the Board of Trade, for the licensing of Seamen's Lodging Houses, under the Merchant Shipping (Fishing Boats) Act, 1883, section 48, which enacts that "The Sanitary Authority within whose district any seaport town is situate may, "with the sanction of the President of the Board of Trade, from time to time, "make, revoke, alter, and amend bye-laws and regulations relating to Seamen's "Lodging Houses in such town, which shall be binding upon all persons and "bodies keeping houses in which seamen are lodged, and the owners thereof, "and persons employed therein. Such bye-laws and regulations shall, amongst "other things, provide for the licensing of Seamen's Lodging Houses, the "inspection of the same, the sanitary conditions of the same, the publication of "the fact of a house being licensed, the due execution of the bye-laws and "regulations, and the non-obstruction of persons engaged in securing such "execution, the preventing of persons not duly licensed holding themselves out "as keeping or purporting to keep licensed houses, and the exclusion from "licensed houses of persons of improper character, and sufficient penalties for "the breach of such bye-laws and regulations not exceeding in any case the sum "of fifty pounds. All offences under such bye-laws and regulations shall be "deemed to be offences within the Merchant Shipping Acts, 1854 to 1883, and "be punishable accordingly."—And on the written application of the keeper of any registered common lodging house or registered lodging house, made in such form and stating such particulars as the Council require, the Council will, if they see fit, grant to such keeper a license authorizing him to designate his registered house a Seamen's Licensed Lodging House.

During the year no applications were made for registration, but 15 of the licenses previously granted were renewed, leaving the number on the Register 15.

SUB-LET HOUSES.

The number registered during 1893 was 510, making the total on the Register on the 31st December, 20,358. The number of visits paid during the night was 15,471, and during the day 99,897, with the result of finding 1,259 rooms overcrowded. In addition to overcrowding, the cases of permitting males and females not married to occupy the same room comes under the notice, and are entered in the books of the Inspectors. There were 517 rooms thus indecently occupied. The character of the indecent occupation may be judged of from the following facts:—In 294 instances one man and two women were found in the same bedroom ; in 162 instances two men and one woman ; in 20 instances two men and two women ; in 24 instances one man and three women ; in 8 instances three men and one woman ; in 2 instances two men and three women ; in 4 instances one man and four women ; in 1 instance four men and one woman ; in 1 instance four men and two women ; in 1 instance six men and one woman.

Informations were laid against 1,889 chief tenants for breaches of the bye-laws, with the following results:—3 fined 1s. ; 1,830 fined 1s. and 1s. costs ; 15 fined 1s. 6d. and 1s. 6d. costs ; 8 fined 2s. and 2s. costs ; 27 fined 2s. 6d. and 2s. 6d. costs ; 3 fined 5s. and 4s. 6d. costs ; 2 fined 10s. and 4s. 6d. costs ; and 1 fined 20s. and 4s. 6d. costs ; making a total of fines levied during the year of £197 17s. 0d. Of the remaining 29 cases, 23 informations were withdrawn and 6 acquitted, the tenants having complied with the bye-laws.

CANAL BOATS.

The following Report on the execution of the Canal Boats Acts, 1877 and 1884, by the Liverpool Sanitary Authority during the year 1893, was sent to the Local Government Board.

The Leeds and Liverpool Canal Company are proprietors of the only Canal having direct communication with Liverpool, and the length of the water-way within the city, exclusive of the locks which lead to the Docks, is about three miles.

The duties of measuring and inspecting the boats are discharged by Mr. Wilson, Chief Lodging-house Inspector, and Mr. Thornthwaite, Lodging-house Inspector. There is no additional salary paid them beyond that of Lodging-house Inspectors.

The number of visits and inspections of Canal Boats during the year was 4,955.

60 Boats were found to be used as dwellings,
and not registered. } 59 abated, and 1 notice not expired.

60 Notices were sent to the owners.

48 were found without Certificates on board. } 45 abated, 2 notices not expired, and 1 not seen since by the Inspectors.

48 Notices were sent to the owners.
35 were found not having the registered number painted on both sides of the boat. } 33 abated, and 2 not seen since by the Inspectors.

35 Notices were sent to the owners.
2 were found not having the name painted on the boat. } Abated.
2 notices were sent to the owners.

158 Cabins, used as dwellings, were found in a dilapidated and insanitary state, caused by leaky decks (91), general leaky condition of boats (39), no doors to lockers (4), broken scuttle covers (2), defective ventilation (12), defective stoves (2), and broken floors (8).

158 Notices were sent to the owners—156 abated, and 2 not seen since by the Inspectors.

42 had defective second bulkheads ; 42 notices were sent—abated.

73 required the cabins painting ; 73 notices were sent to owners—59 abated, 2 notices not expired, 10 not seen since by the Inspectors, and 2 discontinued as dwellings.

38 had dirty cabins and required cleaning ; 21 verbal notices given to masters—abated, and 17 notices sent to owners—16 abated, and 1 not seen since by the Inspectors.

Informations were laid in 9 cases for infringements of the Acts and Regulations, viz. :—causing unregistered boats to be used, 4 ; non-separation of sexes, 5. In 8 of the cases fines were inflicted, varying from 5s. and 4s. 6d. costs, to 20s. and 4s. 6d. costs, and 1 was acquitted.

There was no infectious sickness on the boats during the year.

50 notices were sent to the School Board of children living on canal boats and not attending any school.

The number of boats on the register is 587, of which 236 have been re-registered, viz. :—5 in 1884, 60 in 1885, 21 in 1886, 25 in 1887, 20 in 1888, 24 in 1889, 23 in 1890, 23 in 1891, 16 in 1892, and 19 in 1893.

During the year 36 new boats were registered and 19 re-registered on account of changes of owners.

New certificates were issued to 4 boats, owing to structural alterations.

There were 66 changes of masters reported, and the necessary records made on the register.

LICENSES FOR CATTLE.

During the year 4 applications were made to the Health Committee for licenses to keep 42 cows, of which 2 were granted to keep 21 cows. There are at present 344 shippings licensed to keep 4,634 cows. 36 of the shippings previously licensed have been transferred to fresh tenants.

6 applications were made during the year to keep pigs in styse separate from and unconnected with shippings ; 2 were granted. The total number of premises or styse now licensed in the City is 28 for keeping a total number of 98 pigs.

In addition to the above, 7 applications were made to keep 24 cows beyond the number for which licenses had been granted. 6 of the applications were granted in respect to a total of 18 cows.

DAIRIES, COWSHEDS, AND MILKSHOPS ORDER.

Number of applications for registration during the year	253
Of which transfers were	171
Number of applications granted	221
,, ,, refused	32
Number on the register at the end of 1892	1473
,, 1893	1360

CONTAGIOUS DISEASES (ANIMALS) ACT, 1878.

This Act and the orders made under it by the Board of Agriculture, were referred by the City Council to the Medical Officer of Health to carry out in conjunction with the Veterinary Inspector, the Inspector of Nuisances, and the Meat Inspectors.

PLEURO-PNEUMONIA.

There was no case of this disease in Liverpool during the year. There was a suspected case in Bootle which the Veterinary Inspector examined; he sent the lungs to the Board of Agriculture, where it was decided to be a case of non-infectious pleuro-pneumonia. The Veterinary Inspector, by order of the Board, examined and frequently re-examined 20 head of cattle, which had been in contact with the suspected beast, he found them healthy and they remained well.

TABLE No. 1.

SUMMARY of Examinations by direction of the Board of Agriculture, by
Richard S. Reynolds, M.R.C.V.S., Veterinary Superintendent for the
Corporation of Liverpool.

PLEURO-PNEUMONIA.

Cattle.	ANIMALS EXAMINED.			POST MORTEM EXAMINATIONS.		
	Healthy.	Affected.	Total.	Healthy.	Affected.	Total.
In Liverpool.....	..	..	..	..	..	...
From other Places	20	..	20	*1	..	1
Total	20	..	20	1	...	1

Mr. Reynolds was appointed to act as Veterinary Inspector for Liverpool under the Board of Agriculture.

* Suspicious lungs forwarded to Board of Agriculture.

TUBERCULOSIS.

When cattle are slaughtered in Liverpool and the animals found to be affected with tuberculosis, the lungs are examined by the Veterinary Inspector, and table No. 2 gives the results of his examinations.

The number of affected cows from Liverpool Dairies was found to be fewer than was thought to be the case, considering the reports made in other Cities.

TABLE No. 2.

Veterinary examinations, by request of the Board of Agriculture, of lungs of cattle killed at the Liverpool Abattoirs.

Total Number of Lungs affected with Tubercle examined.	Tuberculous lungs of cows from Liverpool dairies.	Tuberculous lungs of cattle from districts outside the City.	Carcases of animals having Tuberculous lungs seized and destroyed.	Carcasses of animals having lungs slightly affected with Tuberculosis passed for consumption by Meat Inspectors.
449	150	299	191	258

SUMMARY of Veterinary Inspections under the Contagious Diseases (Animals) Act.—*Continued.*

TABLE No. 3.

RABIES.

Animals Examined.	Affected.	Not Affected.	Post-Mortem Examinations.	Affected.	Not Affected.
—	—	—	34	—	34

TABLE No. 4.
GLANDERS AND FARCY.

Post-mortem Examinations.	Animals Examined.	Affected.	Not Affected.	Inspection of infected places cleansed and disinfected.
—	7	2	5*	—

* 1 Suspicious.

TABLE No. 5.
SWINE FEVER.

	No. of Outbreaks.	Post-mortems.	LIVE ANIMALS EXAMINED.		Total.
			Healthy.	Diseased.	
In Liverpool	1	3	50	—	50
,, Suburbs	3	3	12	—	12
	4	6	62	—	62

SANITARY OPERATIONS.

For the purpose of carrying out the remaining requirements of the various Sanitary Acts, there is a staff which comprises 23 District Inspectors for general sanitary purposes, all of whom hold a qualifying certificate of the Sanitary Institute of Great Britain. There are 4 Inspectors of Meat, 3 Inspectors of Fish, 2 Inspectors under the Contagious Diseases (Animals) Acts, 1 under the Sale of Food and Drugs Act, 2 under the Workshop and Shop Hours Act, 2 Smoke Inspectors, 8 Ambulance and Disinfecting Inspectors, and 2 Superintendents of Disinfecting Apparatus.

PROCEEDINGS UNDER THE CONTAGIOUS DISEASES (ANIMALS) ACT, 1878.

Number of Visits to Railway Stations, including inspections made on						1893.	1892.
Sundays	..	..	..	..	..	3,259	3,343
,, Inspections of pens	..	..	..	..	..	100,950	102,560
,, found clean	..	..	..	..	..	80,517	79,248
,, „ dirty and cleansed before being used	..	..	..	..	..	20,433	23,312
,, Informations for dirty pens used before being cleansed	..	..	..	..	..	—	—
,, Inspections of Trucks	..	..	..	..	..	28,558	28,267
,, found clean	..	..	..	..	..	24,624	24,616
,, „ dirty and cleansed before being used, or leaving the City dirty	..	..	..	..	..	3,934	3,651
,, Informations for dirty trucks used before being cleansed	..	..	..	..	..	—	—
,, Inspections of Horse Boxes	..	..	..	..	..	244	317
,, found clean	..	..	..	..	..	146	197
,, „ dirty and cleansed before being used, or leaving the City dirty	..	..	..	..	..	98	120
,, Informations for dirty horse boxes used before being cleansed	..	..	..	..	..	—	—
Number of Inspections of Vessels	..	..	..	..	..	9,103	9,157
,, found clean	..	..	..	..	..	4,027	4,247
,, „ dirty and cleansed before being used, or going to Sea without cattle or cargo	..	..	..	..	..	5,076	4,910
,, Informations for dirty vessels used before being cleansed	..	..	..	..	..	2	3
,, Inspections of Gangways	..	..	..	..	..	8,366	7,284
,, found clean	..	..	..	..	..	6,731	5,692
,, „ dirty and cleansed before being used	..	..	..	..	..	1,635	1,591
,, Informations for not cleansing gangway	..	..	..	..	..	—	1
,, Informations for not disinfecting scrapings and sweepings	..	..	..	..	..	1	—
Number of Inspections of Lairage and Sale Yards	..	..	..	..	..	3,612	3,769
,, found clean	..	..	..	..	..	2,769	2,859
,, „ dirty and cleansed before being used	..	..	..	..	..	843	910
,, Informations for dirty Lairages used before being cleansed	..	..	..	..	..	—	—
,, Informations for landing fittings without consent in writing of the Local Authority	..	..	..	..	..	2	—
,, „ „ „ landing broken fodder	..	..	..	..	..	1	1
,, „ „ „ carrying newly-shorn sheep on upper deck	..	..	..	..	..	1	—
Total Number of Informations	..	..	..	..	..	7	5
Fined	..	..	..	..	..	7	5
Withdrawn	..	..	..	..	..	—	—
Amount of Fines and Costs	..	..	..	..	..	£49 16 6 | £19 10 0	

**RETURNS OF CATTLE KILLED IN THE CITY SLAUGHTER-HOUSES,
AND OF IMPORTED DEAD MEAT.**

STREET.	Beasts.	Sheep.	Lambs.	Calves.	Pigs.	Dead Meat Imported for Sale.			
						Beasts.	Sheep.	Pigs.	Calves
Abattoir.	15791	243314	1	17245	21916	30711	258387	..	494
Back Butler Street	322	501	296	37	6	..	..	..	..
Back Castle Street	1160	1685	..	696	3	..	45	..	..
Back Mount Vernon Green	550	3426	1078	44	..	..	..	..	..
Cotter Street.....	40	58	12	5	1781	..	..	..	..
Corlett Street	156	1716	435	60	..	..	..	..	..
Crown Street.....	128	1381	323	..	..	..	..	..	..
Darnley Street .....	..	..	..	..	2316	..	..	..	..
Edgeware Street	53	693	188	..	..	..	..	..	..
Embledon Street	989	5004	1462	41	8	..	..	..	..
Foley Street .....	..	..	..	..	3957	..	..	..	..
Gelling Street	310	554	532	157	..	..	..	..	..
Peel Street.....	71	1090	355	15	40	2	..	..	..
Bevington Hill	1738	1183	92	1299	6	..	274	..	..
Benledi Street .....	..	..	..	..	797	..	..	..	..
Byrom Street .....	..	..	..	..	1390	..	..	..	..
Bolton Street.....	257	2900	1121	18	..	..	..	..	..
Back Commutation Row(1)	..	16	6	..	..	..	..	..	..
," , (2)	283	1844	384	2	..	..	..	..	..
Copperas Hill .....	..	..	..	..	10143	..	..	..	..
Finch Place	557	2250	1094	4	..	..	..	..	..
Frederick Street	28	195	290	10	7	..	..	..	..
Hodson Street	75	566	131	70	..	..	..	..	..
Lydia Ann Street.....	376	3160	355	..	..	..	..	..	..
Norman Street .....	..	..	..	..	1780	..	..	..	..
Norfolk Street .....	..	3340	769	..	..	..	..	..	..
Soho Street .....	..	..	..	..	1953	..	..	..	..
Upper Milk Street .....	..	..	..	..	6052	..	..	..	..
Total in Private Slaughter-houses.....	7093	31562	8923	2458	30239	2	319	..	..
Total in the City	22884	274876	8924	19703	52155	30713	258706	..	494

PRECEDING YEAR.

Total in Private Slaughter-houses.....	5079	32032	9940	1633	40440	2210	..	..	..
Total in the City	16779	270762	9969	18334	69132	37720	210532	..	1471

There is a considerable increase over the preceding year in the number of cattle slaughtered in the City slaughterhouses, upwards of 6,000 more being slaughtered than in the preceding year, but there is a falling off in the carcases of dead meat imported for sale; the total being about 7,000 less than in the preceding year. The live cattle are not brought to the market in such large numbers when there is a large importation of carcases, but with regard to sheep there is an increase of about 4,000 in the number killed in the City, and an increase of about 48,000 in the number of carcases imported for sale.

SLAUGHTERHOUSE TRANSFERS.

There were two transfers of licences granted in respect to the undermentioned premises, viz. :—

Premises.	Granted.	Date 1893.
Nos. 18 and 20, Gill Street ...	1	23rd March.
No. 134, Upper Frederick Street ...	1	23rd March.

UNWHOLESOME MEAT, FISH, &c., SEIZED AND DESTROYED.

DATE.—1893.

SLAUGHTER HOUSES.	Beef.		Veal.		Mutton.		Pork.		Poultry		Rabbits and Hares.		Fish.		Shell fish.		Oysters.		Fruit.		Sundries.	
	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Head						Lbs.	Bags.					Lbs.			
Abattoir ..	277461	10800	25732	10171	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Back Castle Street ..	39598	2747	812	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Back Butler Street ..	..	..	50	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Benledi Street ..	..	..	..	..	200	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bevington Hill ..	56036	3106	933	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bolton Street ..	800	..	85	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Byrom Street ..	30	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Copperas Hill ..	..	..	..	..	..	1507	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Corlett Street ..	..	..	..	76	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Darnley Street ..	..	..	..	..	..	200	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Foley Street ..	..	..	..	..	..	195	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gelling Street ..	690	240	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mill Street ..	465	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Norman Street ..	..	..	..	..	..	275	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Soho Street ..	..	..	..	..	..	100	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
MARKETS.	St. James' ..	90	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	St. John's ..	716	552	..	644	..	1094	1475	..	168644	216	..	..	..	..	..	..	..	..	..	..
	St. Martin's ..	1739	..	..	185	222	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
OTHER PARTS.	Atwell Street ..	..	..	105	..	..	..	..	..	..	110	..	..	..	..	..	..	..	..	..	..
	Beaufort Street ..	160	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cazneau ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1584	Apples	..	..
Currie ..	..	125	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dale ..	..	59	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Fox ..	..	130	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gt. Charlotte Street ..	..	..	..	..	..	..	..	27	77	16121	..	..	..	..	..	..	..	..	..	..	..
Gt. Homer Street ..	626	18	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	380	Apricots	..	..
Hood Street ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	250	Damsons	..	..
Heyworth Street ..	*31	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Manesty Lane ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mathew Street ..	2016	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mount Vernon Green ..	..	..	..	56	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Park Lane ..	1344	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Park Road ..	82	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Queen Square ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	200	Pears	..	..
Ranelagh Street ..	140	..	..	160	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rose Hill ..	..	..	..	70	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rose Street ..	..	..	42	..	..	..	..	64	102	16855	10	1500	..	..	..	..	..	..	..	..	..
Richmond Row ..	..	..	..	..	..	..	..	..	4	..	..	..	..	..	..	..	..	..	..	..	..
Scotland Road ..	436	..	..	125	95	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Stanley Road ..	42	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Springfield Street ..	..	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Upper Hill Street ..	448	..	..	..	40	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Vauxhall Road ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
West Derby Road ..	4	..	..	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Walter Street ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Williamson Square ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Windsor Street ..	76	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	383351	17505	29037	13205	1185	1658	205559	226	1500	2414								4312				

* Horse Flesh.

The quantity of meat found to be unfit for human food is 197 tons, and of fish 91 tons.

There is a large increase in the number of smothered and injured cattle. These are mainly cattle imported from Ireland, the cross channel traffic being attended with more injury and damage to the cattle than is sustained by cattle which have been brought across the Atlantic.

Total quantity of Meat and Fish found to be unfit for human food :—

	Tons	cwts.	qrs.	lbs.
Meat	197	16	18	8
Fish	91	15	1	11
				1893. 1892.
Number of Visits to Slaughterhouses made by Meat Inspectors ..	11,324		11,775	
,, ,, Butchers' Shops ,, ,, ..	49,240		45,992	
,, ,, Fish Shops ,, Fish Inspectors ..	40,705		40,756	
,, ,, Poultry Depots	463		387	
,, Informations in respect to Diseased Meat and Fish ..	22		25	
,, Fined	15		22	
,, sent to Gaol	1		—	
Amount of Fines and Costs	£75 17 0	|	£79 18 6	

SMOTHERED AND INJURED CATTLE.

Beasts.	Sheep.	Pigs.	Number found good.	Number found bad.	Weight of Bad in pounds.
223	141	100	206	258	147,237

KNACKERS' YARDS RETURNS.

	Horses Destroyed.	Horses taken in Dead.	Asses Destroyed.	Cows Destroyed.
Holme Street	1,078	1,200	25	53
Grafton Street	38	38	1	2
Total	1,116	1,238	26	55

OFFENSIVE TRADES.

		<u>1893.</u>	<u>1892.</u>
Number of visits ..	.. . . . . . . . . .	619	503

Applications for permission to carry on the following offensive trades were made during the year, and a report by the Medical Officer of Health on each application was submitted to the Health Committee.

Premises.	Business.	Granted.	Refused.	Date 1893.
No. 1, Edgar Street ..	Soap Making	1	—	1st June.
No. 1, Edgar Street ..	Tallow Melting .. .	—	1	1st June.
No. 153, Vauxhall Rd.	Soap Making	1	—	6th July.

MANURE YARDS AND WHARVES.

		<u>1893.</u>	<u>1892.</u>
Number of visits ..	.. . . . . . . . .	563	521

GRAVES.

Number examined and measured ..	.. . . . . . . .	42	69
„ of Visits to Cemeteries ..	.. . . . . . . .	36	—

SHIPPON AND PIGGERY INSPECTION.

		<u>1893.</u>	<u>1892.</u>
Number of Inspections of Shippsons and Piggeries ..	.. . . . . . . .	1,001	1,395
„ Informations .. . . . . . . .	.. . . . . . . .	4	4
„ Fined .. . . . . . . .	.. . . . . . . .	4	3
Amount of Fines and Costs ..	.. . . . . . . .	£3 2 6	| £1 8 6

DAIRIES AND MILK SHOPS.

		<u>1893.</u>	<u>1892.</u>
Number of Inspections of Dairies and Milk Shops ..	.. . . . . . . .	2,089	2,378
„ found Incorrect .. . . . . . . .	.. . . . . . . .	118	312
„ of Informations .. . . . . . . .	.. . . . . . . .	12	20
„ Fined .. . . . . . . .	.. . . . . . . .	9	7
„ Acquitted and Withdrawn ..	.. . . . . . . .	3	13
Amount of Fines and Costs ..	.. . . . . . . .	£6 0 6	| £2 2 6

NUISANCES.

			<u>1893.</u>	<u>1892.</u>
Number of Complaints made by Inhabitants			6,664	6,219
,, Nuisances discovered on above complaints			10,806	8,879
,, „ „ house to house inspection..			46,291	45,196
,, Notices issued..			34,558	35,221
,, Notes to complainants			3,153	3,145
,, „ sent to comply with notices			4,175	4,765
,, Nuisances re-inspected			73,106	75,147
,, „ abated on re-inspection			40,617	41,776
,, Drains repaired			9,703	8,888
,, Ashpits „			4,098	2,351
,, Closets „			8,123	8,032
,, Spouts fixed and repaired			1,441	3,295
,, Places from which animals have been removed ..			606	706
,, Offensive Matter removed from premises ..			4,834	4,442
,, Stagnant Water „ „			2,716	4,050
,, Dilapidated Houses			2,051	4,095
,, Premises supplied with water			6,905	5,746
,, Chimneys repaired to abate smoke nuisances ..			35	38
,, Cellar Rails repaired			105	142
,, Sanitary defects referred to the undermentioned Departments, viz. :—				
School Board			10,876	8,945
City Engineer's			1,896	1,975
Building Surveyor			1,068	1,111
Water Engineer			5,700	6,109
Veterinary Superintendent			1,763	1,878
,, Informations laid			1,286	1,833
,, Fined			309	397
,, of Magistrates' Order			516	678
,, Acquitted or Withdrawn			461	758
Amount of Fines and Costs			£271	5 | £267
			5	3 0

The advice and assistance of the Department were sought more frequently during the past year than in any preceding year, the applications made by the inhabitants being 6,664, an increase of several hundreds over the year 1892. Many of these applications were in respect to large and important public buildings and offices, such as Insurance Buildings, Banks, Hospitals, Clubs, and Offices. A great deal of time of the Inspectors was taken up by these special examinations.

The references to the Water Engineer comprise, mainly, defective fittings, resulting in waste of water; also cases in which the supply was insufficient, owing to various accidental causes.

REFERENCES FROM OTHER DEPARTMENTS.

		<u>1893.</u>	<u>1892.</u>
Received from the City Engineer		12,056	12,398
„ Veterinary Superintendent		3,562	3,344
„ Water Engineer		2,538	2,980
„ Lodging-house Inspectors		1,911	2,668

The references from other Departments mainly comprise insanitary conditions discovered by officers belonging to those Departments, but with which it is not within their province to deal.

HOUSE TO HOUSE VISITATION.

		<u>1893.</u>	<u>1892.</u>
Number of Inspections of Street Houses		7,574	7,307
„ Street Houses found Clean		6,463	5,991
„ „ „ „ Dirty		1,111	1,316
„ Apartments in Street Houses Examined		34,935	31,629
„ Inspections of Court Houses		2,234	2,288
„ Court Houses found Clean..		1,633	1,553
„ „ „ „ Dirty..		601	735
„ Apartments in Court Houses Examined..		6,728	6,662
„ Re-inspections of Dirty Houses..		4,598	5,451
Total Number of Houses Examined		14,406	15,046

The systematic house-to-house visitation has been retarded during the year from various causes, the chief one being the time taken up in dealing with reports relating to infectious disease. (See pages 55 and 56.)

COURT AND ALLEY EXAMINATIONS.

		<u>1893.</u>	<u>1892.</u>
Number of Visits to Courts and Alleys		80,794	108,261
„ Closets found Dirty, but Cleansed by Officer's Instruction	76,159		87,132
„ Informations..	58		149
„ Fined	48		139
Amount of Fines and Costs	£4 19 0	| £15 13 0	

The changes made in the method of dealing with the courts and alleys have been attended with satisfactory results, both in ensuring constant cleanliness in the courts and alleys, and also economising the time of the inspector by employing it in the most efficient manner. The aim has been to keep the courts and alleys uniformly clean throughout the week, and with this view the

district inspectors are instructed that every tenant in each court is in turn to be held responsible for the cleanliness of the court for a period of one week ; the inspector records in his visiting book whose turn it is, and duly informs that tenant. Failing compliance with his requirements, an information is laid under a bye-law of the Local Sanitary Act.

The magistrate has rendered great help to the department by imposing a small fine in each case in which a prosecution was necessary. As a consequence there is a marked improvement in the condition of the courts, and also in the apparent willingness of the people to cleanse them. The attention of the officer is, however, very necessary, since when the visits are lessened the dirty conditions are soon apparent.

EXAMINATION OF CELLAR DWELLINGS.

					<u>1893.</u>	<u>1892.</u>
Number of Street Cellars inspected ..	..	..	..	..	4,731	5,837
,, ,, ,, found empty ..	..	..	..	..	153	223
,, ,, ,, used for Lumber, &c. ..	..	..	..	..	2,136	2,180
,, ,, ,, found illegally occupied ..	..	..	..	..	174	119
,, ,, ,, legally ,, ..	..	..	..	..	2,268	3,315
,, ,, ,, dirty ..	..	..	..	..	564	527
Notices issued to Owners ..	..	..	..	..	178	118
,, ,, Occupiers ..	..	..	..	..	1	..
,, Informations against Street Cellar Owners ..	..	..	..	..	19	19
,, Fined ..	..	..	..	..	17	8
,, of Informations against Street Cellar Occupiers ..	..	..	..	..	6	5
,, Fined ..	..	..	..	..	3	5
,, of Court Cellars inspected ..	..	..	..	..	633	674
,, ,, found empty ..	..	..	..	..	27	67
,, ,, used for Lumber, &c. ..	..	..	..	..	464	428
,, ,, illegally occupied ..	..	..	..	..	35	31
,, ,, legally ,, ..	..	..	..	..	107	148
,, ,, found dirty ..	..	..	..	..	21	47
,, Informations against Court Cellar Owners ..	..	..	..	..	21	9
,, Fined ..	..	..	..	..	14	4
,, of Informations against Court Cellar Occupiers ..	..	..	..	..	3	4
,, Fined ..	..	..	..	..	3	4
Amount of Fines and Costs ..	..	..	..	..	£14 11 6	£5 16 6

The total number of cellar dwellings at present upon the register amounts to 9,546. A great many of these are untenanted, and are not likely to be re-occupied as dwellings.

WATER CLOSET CONVERSIONS.

							<u>1893.</u>	<u>1892.</u>
Number of Notices ..	..	..	..	..	..	..	4	17
,, Certified ..	..	..	..	..	..	..	4	17
,, Constructed ..	..	..	..	..	..	..	4	16

INFECTED AND DIRTY HOUSES.

							<u>1893.</u>	<u>1892.</u>
Number of Infected Street Houses Inspected ..	..	..	..	..	..	..	3,905	2,098
,, „ Court „ „ ..	..	..	..	..	..	..	289	170
„ „ Cellars „ ..	..	..	..	..	..	..	58	51
„ Notices to Owners to Cleanse Infected Houses ..	..	..	..	..	..	..	4,131	2,057
„ „ „ Dirty Houses ..	..	..	..	..	..	..	1,424	1,822
„ „ Occupiers to Whitewash Dirty Houses ..	..	..	..	..	..	..	234	437
„ „ Owners to Whitewash Exterior of Courts ..	..	..	..	..	..	..	975	1,877
„ Informations ..	..	..	..	..	..	..	92	169
„ Fined ..	..	..	..	..	..	..	35	74
„ Acquitted and Withdrawn ..	..	..	..	..	..	..	57	95
Amount of Fines and Costs ..	..	..	..	..	..	..	£22 3 6	£44 19 0

The increase in the number of cases of infectious disease notified during the year threw a large amount of additional work upon the department, and, in fact, occupied the whole time of several Inspectors who otherwise would have been employed in general sanitary purposes.

There is an increase of upwards of 2,000 over the preceding year in the number of infected houses. In all cases of Smallpox and in all cases of Typhus Fever, a special visit is paid by the Inspector to the house from which the patient has been removed, to ascertain whether any further sickness has developed. These inquiries are made at intervals of a day or two for one month, and any case of sickness, however trifling it may appear to be, is at once reported to, and visited by, the Medical Officer. The utility of this practice will be apparent, when it is stated that by these inquiries many cases of infectious disease are discovered and removed to the hospital at the earliest possible stage of the disease, and before any serious risk of infection had arisen. Without these inquiries, which have occasioned no inconvenience to anyone, the patients would have remained at home for a longer or shorter period, constituting centres of infection to the neighbourhood.

CASES OF INFECTIOUS DISEASE COMING UNDER THE NOTICE
OF THE MEDICAL OFFICER OF HEALTH DURING 1893.

Year—1893.	Fever.			Small Pox.	Scarlatina.	Measles.	Diphtheria	Membranous Group.	Puerperal Fever.	Erysipelas.	Choleraic Diarrhoea.	Cholera and Cholera Infantum.	TOTAL.
	Typhus.	Typhoid.	Simple.										
January	7	64	4	13	172	136	12	5	12	84	..	..	509
February	6	62	10	19	176	65	14	5	7	76	..	..	440
March ..	26	52	9	8	152	48	8	3	5	83	..	..	394
April ..	22	58	..	12	170	154	15	1	5	63	..	..	500
May ..	16	61	7	12	276	386	21	2	4	86	..	1	872
June ..	8	86	8	3	272	613	16	2	6	87	..	7	1,112
July ..	20	132	14	1	246	163	17	2	4	79	2	15	695
August ..	14	152	5	..	247	54	13	3	6	109	1	7	611
September ..	7	218	18	..	387	94	20	2	9	108	1	3	867
October ..	31	218	10	2	578	136	28	4	11	134	1	1	1,154
November ..	21	184	10	..	458	283	21	5	9	157	..	..	1,148
December ..	5	109	4	5	404	184	25	6	4	129	..	..	875
TOTAL ..	183	1396	99	75	3,538	2,316	210	40	82	1195	9	34	9,177
Removed to Hospital	168	728	38	73	1,380	94	27	3	5	188	..	1	2,705

The number of patients removed to hospital includes those taken to General Hospitals as well as those taken to Isolation Hospitals.

Of the patients removed to Hospital the following were conveyed by the Sanitary Officers:—769 cases of Fever, 1,337 cases of Scarlatina, 63 cases of Small Pox, 51 cases of Measles, 36 cases of Diphtheria, and 15 cases of Chicken Pox, and 14 cases of suspected Small Pox, making a total of 2,285 persons.

In accordance with the arrangements made with the School Board, 4,614 postcards were sent to the Head Masters of the various schools, informing them that children from infected houses attended their schools. Similar information was sent to the School Board.

PATIENTS REMOVED TO HOSPITALS.

Netherfield Road.	Grafton Street.	Park Hill.	Brownlow Hill.
792	921	437	135

THE DISINFECTING APPARATUS.

The number of articles disinfected at the Apparatus during the year amounted to 55,994.

DATE. 1893.	Number of Beds.	Number of Mattresses.	Number of Pieces of Bedding.	Number of Pieces of Wearing Apparel, &c.	Total Number of Articles.
January .. .	333	333	1,910	772	3,348
February .. .	289	318	1,919	1,360	3,886
March .. .	261	364	1,926	845	3,396
April .. .	343	413	2,437	898	4,091
May .. .	287	317	2,017	1,196	3,817
June .. .	347	380	2,422	1,302	4,451
July .. .	457	444	2,995	1,175	5,071
August .. .	353	351	2,310	1,401	4,415
September .. .	438	356	2,902	769	4,465
October .. .	534	441	3,750	798	5,523
November .. .	590	520	4,193	1,225	6,528
December .. .	620	562	4,403	1,418	7,003
Totals .. .	4,852	4,799	33,184	13,159	55,994

The number of articles destroyed at the Apparatus during the year amounted to 2,324, compensation being paid in conformity with the provisions of the Public Health Act.

DATE. 1893.	Number of Beds.	Number of Mattresses.	Number of Pieces of Bedding.	Number of Pieces of Wearing Apparel, &c.	Total Number of Articles.
January .. .	9	33	34	103	179
February .. .	24	68	30	95	217
March .. .	8	31	14	69	122
April .. .	41	84	156	175	456
May .. .	18	40	105	166	329
June .. .	10	26	38	35	109
July .. .	21	40	66	119	246
August .. .	15	26	37	39	117
September .. .	16	37	46	42	141
October .. .	14	51	49	87	201
November .. .	13	41	39	28	121
December .. .	9	29	36	12	86
Totals .. .	198	506	650	970	2,324

The collection, removal, disinfection and return of infected bedding has been carried on as hitherto by the officers of the Sanitary Department.

A Steam Disinfector of the pattern of Messrs. Manlove, Alliot & Co. was opened at Chisenhale Street, at the beginning of 1894, to replace the dry-heat apparatus at Ford Street.

DISINFECTION OF HOUSES.

In all cases of infectious disease the houses were disinfected, free of cost, with sulphurous gas; but whenever there was sickness in any room of the house, so as to endanger health by the use of sulphurous gas, disinfectants were given to the tenants for use in the sick room until the sulphurous gas could be used safely. No house is considered properly disinfected until sulphurous gas has been used. The existence of sickness, and the consequent employment of carbolic acid powder, necessitate many visits by the persons in charge of disinfection. There were in all 8,193 visits paid during the year to houses for the purpose of disinfection, the number of houses properly disinfected being 4,393.

PRINCE'S DOCK MORTUARY.

The Mortuary at the Prince's Dock is for the reception of the bodies of persons who have been drowned, killed, &c., and over which the Coroner has to hold inquests. Bodies are taken there by the police, and when it may be necessary to make post-mortem examinations, any medical gentleman may have the assistance of an Inspector on sending a communication to No. 9, Milton Street, Scotland Road.

BODIES REMOVED TO THE PRINCE'S DOCK MORTUARY.

Number from River.	Number from City.
28	56

REMOVALS TO MORTUARIES ON MEDICAL CERTIFICATES OR ON MAGISTRATES' ORDERS.

Bodies Removed to Mortuaries.

Smithdown Road.	St. Martin's.	Mill Road.	Anfield.	Belmont Road.	Park Hill.	Netherfield Road.
1	10	..	1	1	1	1

PROCEEDINGS FOR EXCESSIVE SMOKE.

						1893.	1892.
Number of Town Notices	...	...	...	...	...	317	261
," River	,,	,,	,,	,,	,,	287	294
," Informations against Manufactories						328	347
," Fined	,,	,"	Steamers	,,	,,	281	297
," Acquitted or Withdrawn	...	...	..	...	...	597	636
Amount of Fines and Costs	...	...	...	...	...	12	8
						£764 1 6	£736 14 6

FACTORY AND WORKSHOPS ACT, 1891.

The Shop Hours Act came into operation in Liverpool on 1st January, 1893, and there have been 3,907 visits paid during the day, and 1,968 visits made after six o'clock; of these 4,659 were found to be correct, and 1,216 incorrect.

The persons concerned evinced every desire to comply with the requirements of the Act, and very little difficulty has been experienced so far in shewing that the requirements should be complied with.

It has not been necessary to lay any informations.

	<u>1893.</u>	<u>1892.</u>
Number of Workshops inspected, protected ..	.. 824	.. 208
„ „ „ non-protected ..	112	36
„ Workrooms measured	1,036	..
Visits to Workshops	4,347	..
Workshops found incorrect	2,202	348

THE SANITARY DEFECTS INCLUDE:—

BAKEHOUSES.

Number of Inspections during the year	6,587
,, found dirty	558
,, of Notices served to limewash and cleanse	558
,, Notices issued to remedy other Sanitary defects	18
viz.:—13 defective drains, 3 defective water-closets, 1 defective flagging in yard, and 1 defective roof. All notices were complied with.	

References were sent to the Factory Inspector that 8 females under the age of 18 years were found working in Bakehouses.

Proceedings under the Food and Drugs and Margarine Acts.

SAMPLES TAKEN FOR ANALYSIS.

No. of Samples purchased.	Description of Samples.	Adulterated.	Information.
534	New Milk	88	80
115	Skimmed Milk	25	21
14	Condensed Milk .. .. ..	..	..
2	Cream .. .. ..	..	..
32	Butter	1	1
18	Lard .. .. ..	..	..
6	Cheese .. .. ..	..	..
14	Tea .. .. ..	..	..
14	Coffee	1	1
6	French Coffee .. .. ..	..	..
12	Mustard .. .. ..	..	..
20	Pepper .. .. ..	..	..
6	Cayenne Pepper .. .. ..	..	..
6	Cocoa .. .. ..	..	..
4	Piccalilli .. .. ..	..	..
5	Pickles .. .. ..	..	..
1	Roast Mutton	1	..
4	Ground Ginger .. .. ..	..	..
15	Egg Powder	7	..
2	Custard Powder	2	..
4	Arrowroot .. .. ..	..	..
2	Liquorice	2	1
4	Honey .. .. ..	..	..
2	Marmalade .. .. ..	..	..
7	Jam .. .. ..	..	..
3	Sweetmeats .. .. ..	..	..
6	Bread .. .. ..	..	..
4	Bread and Butter .. .. ..	..	..
5	Yeast .. .. ..	..	..
10	Baking Powder	2	..
3	Flour .. .. ..	..	..
6	Tartaric Acid .. .. ..	..	..
7	Cream of Tartar .. .. ..	..	..
3	Olive Oil .. .. ..	..	..
1	Olives .. .. ..	..	..
3	Medicine Prescriptions .. .. ..	..	..
1	Preserved Pineapple .. .. ..	..	..
5	" Peas	3	..
4	" Beans	4	..
1	" Tomatoes	1	..
1	" Vegetables	1	..
1	" Ginger .. .. ..	..	..
1	" Walnuts .. .. ..	..	..
2	Ground Cassia .. .. ..	..	..
3	Cornflour .. .. ..	..	..
1	Ground Rice .. .. ..	..	..
2	Cinnamon .. .. ..	..	..
1	Vermicelli .. .. ..	..	..
4	Rum	1	1
4	Irish Whiskey	1	1
2	Scotch Whiskey .. .. ..	..	..
2	Gin .. .. ..	..	..
1	Claret .. .. ..	..	..
36	Margarine .. .. ..	..	23
1	Chewing Gum	1	..
17	Vinegar	4	4
Total 990		145 Adulterated.	133
922 preceding year.		185 preceding year.	

SAMPLES OF MILK OBTAINED DURING THE YEAR 1893.

Number of Samples purchased on Week-days ..	..	..	..	..	..	39
,, Informations ..	..	..	..	..	..	48
	<hr/>					12%.
Number of Samples taken at Railway Stations ..	.	..	..	..	..	55
,, Informations ..	..	..	..	..	..	9
	<hr/>					16%.
Number of Samples purchased on Sundays ..	..	..	..	..	..	154
,, Informations ..	..	..	..	..	..	41
	<hr/>					26%.
Number of Samples taken at Railway Stations ..	..	..	..	..	..	40
,, Informations ..	..	..	..	..	..	6
	<hr/>					15%.
					<u>1893.</u>	<u>1892.</u>
Number of Informations ..	..	..	..	..	133	128
,, Fined ..	..	..	..	..	121	115
Acquitted or Withdrawn ..	..	..	..	..	11	13
					<hr/>	
					£656 19 10	£263 10 8

REFUSING TO SELL SAMPLES FOR ANALYSIS.

							<u>1893.</u>	<u>1892.</u>
No. of Informations ..	..	..	..	..	..	..	6	3
,, Fined ..	..	..	..	..	..	..	5	2
Acquitted or Withdrawn ..	..	..	..	..	..	..	1	1
Amount of Fines and Costs ..							£10 8 0	£1 14 0

MARGARINE ACT.

						1893.	1892.
Number of Visits to Shops ..	.	..	..	..	..	2,144	3,025
„ Samples obtained ..	.	..	..	..	..	25	27
„ „ Analysed ..	..	..	..	..	..	—	—
„ Informations ..	..	..	..	..	..	27	23
„ Fined ..	..	..	..	..	..	24	21
Amount of Fines and Costs ..						£29 0 0	£23 19 0

The samples obtained under this Act are not subjected to analysis when the vendor admits that the sample is Margarine, but in all proceedings taken in respect to Margarine, under the Food and Drugs Act, the sample is of course submitted to analysis in compliance with the requirements of the Sale of Food and Drugs Act. The application of the Sale of Food and Drugs Act to

Margarine is of essential importance, inasmuch as any adulterations of Margarine, noxious or otherwise, can be readily dealt with under the Sale of Food and Drugs Act.

It is desirable that attention should be called to the salutary effects of the increase in the amount of the fines inflicted by the Stipendiary Magistrate—thus, in general conditions prejudicial to health described under the common heading of nuisances—it was necessary to send practically as many notices as in the preceding year, but the notices were more readily complied with, as evidenced by the fact that 600 fewer informations were laid than in the preceding year, 1,286, as against 1,833. The same thing is noticed in connection with the inspection of milkshops and dairies, and nuisances arising from excessive smoke, and, what is more important than any, in connection with articles of food and drugs.

SCAVENGING OPERATIONS.

Mr. Richard S. Reynolds, M.R.C.V.S., the Veterinary Superintendent, has charge of the Scavenging Staff, and has kindly supplied the details of the work done by his department.

The amount of manure and refuse collected during the year was 255,208 tons, besides 1,726 tons deposited on tips and new macadam, making a total of 256,934 tons, against 274,802 tons during the previous year. This falling off of 17,868 tons can be accounted for by the long, warm summer, and the high price of coal, consequent on the strike.

The large amount of refuse, amounting to 134,031 tons, was sent out to sea, and the remainder, with the exception of 26,868 tons dealt with by the Destructor, in Chisenhale Street, was disposed of to farmers and contractors.

The unusually hot and dry weather during the year necessitated increased attention to the courts and alleys, and the more frequent flushing of the trough closets, and the Medical Officer has much pleasure in recording his entire satisfaction with Mr. Reynolds' exertions in advancing the sanitary condition of the City.

Year 1893.

TABLE No. 1.

NIGHT SERVICE FOR EMPTYING MIDDENS, COURT ASHPITS, AND SOME OFFICE ASHPITS.

Notices Received.	Middens, &c., Emptied.	Loads of Nightsoil and Ashes.				Nightly average Working Staff.				Analysis of Work.		Average contents of each Midden.	
		Number Removed.		Where Deposited.		Midden Men.	Wharf Men.	Carts.	Horses.	Loads per Man per Night.	Loads per Cart per Night.		
		Manure.	Ashes.	Total.	Chisen-hale Street.	Sandhills.	River Craft Dock.						
914	3,522	..	5,120	5,120	4,615	—	505	7·4	1·	3·4	3·4	1·4	

63

TABLE No. 2.
SERVICE FOR THE COLLECTION AND REMOVAL OF DRY ASHPIT ASHES.

Notices Received.	Ashpits Emptied.	Loads of Dry Ashes.				Average Daily Working Staff.				Analysis of Work.		Average contents of each Ashpit.	
		Where Deposited.				Ashpit Men.	Carts and Wagons.	Horses.	Loads per Man per Day.	Loads per Cart per Day.			
		Chisen-hale Street.	Sandhills.	River Craft.	Waver-tree.								
2,500	394,900	67,456	15,037	18,357	25,235	1	8,826	88·3	65·5	67·8	2·4	3·3	·17

TABLE No. 3.
SERVICE FOR THE COLLECTION AND REMOVAL OF BELL
CART ASHES.

Loads Removed	Where Deposited.				Carts Employed.
	Chisenhale Street.	Sandhills.	River Craft Dock.	Rubbish Tips	
17,475	8,503	2,195	6,767	10	15·8

TABLE No. 4.
SERVICE FOR FLUSHING AND CLEANSING TROUGH WATER
CLOSETS.

	Number of Urinals.	Number of Trough Water Closets.	Average Working Staff.	
			Trough W. C. Men.	Urinal Men.
			43·2	10·

TABLE No. 5.
SERVICE FOR CLEANSING, COLLECTION, AND REMOVAL OF REFUSE FROM STREETS, COURTS, PASSAGES, &c.

Total Number Removed.	Loads of Street Sweepings Removed.				Average Daily Staff.			
	Chisenhale Street.	Sandhills.	Wavertree.	River Craft Dock.	Refuse on Tips and New Macadam.	Scavengers.	Carts.	Horses.
87,312	45,996	13,453	2,934	23,203	1,726	255·8	4·7	15·
						67·9	67·9	4·1

65

TABLE No. 6.
CLEANSING AND REMOVAL OF REFUSE FROM STREETS, COURTS, AND PASSAGES ON SUNDAYS.

Loads of Street Sweepings.							Average Daily Staff.		
Removed.				Where Deposited.					
Manure.		Ashes.	Refuse.	Total.	Chisenhale St.	Sandhills.	River Craft Dock.	Men.	Horses.
Manure.	Refuse.	Manure.	Refuse.	Manure.	Refuse.	Manure.	Refuse.	Men.	Horses.
965	...	2,385	3,350	874	866	24	499	67	1,020
								151·2	28·2

SERVICE	FOR	STREET	WATERING.	SALT	WATER.
TABLE No. 7.					

TABLE No. 8.
REMOVAL OF GARBAGE FROM ABATTOIR.

Loads Removed.	Where Deposited.			Carts employed.
	Chisenhale Street.	Sand- hills.	River Craft Dock.	
1,961	1,438	131	392	1·6

TABLE No. 9.
DESPATCHES OF MANURE AND REFUSE.

	Saleable Manure.			Unsaleable Refuse.			Average Daily Staff.						
	Night Soil.	Sweepings.	Mixture.	Total.	Contractors.	Farmers.	Depots.	Sea.	Destructor.	Total.	Grand Total in Tons.	Inspectors and Foremen.	Labourers.
Chisenhale St., by Flats..	..	2,304	7,344	9,648	672	42,768	2,256	..	..	45,696	55,344	{ 1	20.3
Sandhills,	..	144	..	144	816	11,520	3,312	..	..	15,648	15,792	{ ..	
Do.,	..	3,412	211	3,623	..	8,180	..	..	..	8,180	11,803	{ ..	1.7
Wavertree	2,424	..	2,424	..	..	224	..	..	224	2,648	{ ..	
Chisenhale Street and Sandhills, <i>via</i> Stanley D'k	1,999	1,999	{ ..	2.7
per "Alpha",	60,120	60,120	{ ..	
per "Beta",	2,310	..	{ ..	6.6
River Craft Dock.....	..	2,569	3,843	6,412	..	..	..	..	..	67,362	..	{ 1	57.3
Do., per "Alpha",	4,550	4,550	{ ..	
Do., per "Beta",	26,868	26,868	{ ..	
Chisenhale Street Wharf.	{ ..	
	..	10,853	11,398	22,251	1,488	65,002	5,568	134,031	26,868	232,957	255,208	2.	88.6

TABLE No. 10.
HORSES.—DAILY AVERAGE NUMBER.

New Horses.	Number Disposed of		
Purchased	Bred.	Died.	Destroyed.
31	1	4	4
			3·14
			Sold. 34

TABLE No. 11.
AVERAGE DAILY STAFF OF MEN EMPLOYED.

General.		Night Service.	Day Service.	Stables, Yards, and Stores.	Workshops.	Wharves, Depots, &c	Grand Total.
Inspectors	Inspectors	Wharf Men.	Total.	Watermen.	District Storkeepers.	Passage Men.	574·2
Timekeeper, Checker, &c	Clerks	Midden Men.	Total.	Harrow Men.	Cart Followers.	Gully Men.	18·5
Office Boy.	Inspectors	Wharf Men.	Total.	Watermen.	District Storkeepers.	Passage Men.	30·2
General.	Night Service.	Middle Men.	Total.	Harrow Men.	Passage Men.	Gully Men.	10·1
Inspectors	Inspectors	Trough Closest Men.	Total.	Casual.	Ash Men.	Boat Men.	5·5
Timekeeper, Checker, &c	Inspectors	Urimal Men.	Total.	Crews Hopper Barges.	Carr Hall.	Orderly Boys.	230·6
Office Boy.	Inspectors	Gully Men.	Total.	Horsekeepers.	Night Watchmen.	Cartwrights and Labourers.	16·5
General.	Night Service.	Gullies.	Total.	Cartwrights and Labourers.	Blacksmiths and Strikers.	Paineters.	3·8
Inspectors	Inspectors	Stable-men, Storkeepers.	Total.	Chisenhale St.	Inspectors.	and Sandhills.	19·3
Timekeeper, Checker, &c	Inspectors	Carters, Yardmen, Stable-	Total.	Grosvenor Lane,	Foreman.	Labourers.	63·9
Office Boy.	Inspectors	men, and Storkeepers.	Total.	Various Town	Foreman.	Labourers.	1·1
General.	Night Service.	Cartwrights and Labourers.	Total.	Various Places.	Foreman.	Labourers.	4·2
Inspectors	Inspectors	Cartwrights and Labourers.	Total.	Foreman.	Foreman.	Labourers.	2·7
Timekeeper, Checker, &c	Inspectors	Cartwrights and Labourers.	Total.	Foreman.	Foreman.	Labourers.	94·5
Office Boy.	Inspectors	Cartwrights and Labourers.	Total.	Foreman.	Foreman.	Labourers.	955·9

TABLE No. 12.
Daily Consumption of Provender and Weekly Cost per Horse per Week.
Food and Litter.

Days Keep.	Total Consumption of Food.	Daily Average Consumption per Horse.		Weekly Cost of each Horse's Keep.
		Lbs.	centals.	
93,525	Corn	10,690	centals.	
	Beans and Peas ..	3,394	,"	3·62
	Oats	264	,"	·28
	Bran	1,709	,"	1·82
	Meal	540	,"	·58
	Linseed	958	,"	2·49
	Roots	1,376	,"	10d.
	Grass	10,825	,"	11·57
	Straw	6,836	,"	7·31
	Peat Moss	{ 2,131		Net. 11s. 1d.
	Sawdust	{ 2·28		

CITY HOSPITALS.

CITY HOSPITAL NORTH, NETHERFIELD ROAD.

DISEASES.		Remaining Dec. 31st, 1892.	Patients Admitted 1893.	Total under Treatment 1893.	Discharged Cured.	Patients Remaining Dec. 31st, 1893.	Died within 24 hours of Admission.	Total Deaths.	Mortality per cent. of Admissions.
Typhoid Fever	26	158	184	142	—	23	1	19	12·02
Typhus Fever	8	157	165	128	—	9	5	28	17·83
Scarlet Fever.....	54	492	546	235	228	50	2	23	4·67
Other Diseases	3	71	74	60	—	4	2	10	14·08
Totals	91	878	969	565	228	86	10	80	9·11

*Visiting Physician, Dr. ROBERTSON.**Resident Physician, Dr. ELLIOTT.*

CITY HOSPITAL SOUTH, GRAFTON STREET.

DISEASES.	Remaining in Hospital 31st Dec., 1892.	Admitted into Hospital 1893.	Total under treatment 1893.	Died during 1893.	Discharged to homes 1893.	Transferred to Parkhill 1893.	Remaining in Hospital end of 1893.	Mortality per cent. of Admissions.
Scarlet Fever	44	615	659	38	170	451	43	6·1
Typhoid Fever.....	17	236	253	26	172	56	24	11·0
Typhus Fever	1	10	11	—	11	—	—	—
Diphtheria	—	13	13	4	9	—	1	30·7
Other Diseases	—	95	95	19	76	—	—	20·0
Totals	62	969	1031	87	438	507	68	8·9

*Visiting Physician, Dr. ROBERTS.**Resident Physician, Dr. BLAKEMAN.*

CITY HOSPITAL, PARKHILL.

DISEASES.	Patients in Hospital on December 31st, 1892.	Patients admitted during 1893.		Acute Cases.	Patients remaining in Hospital, December 31st, 1893.	Total number under treatment during 1893.	Deaths and Mortality per cent. of Transferred Cases during 1893.	Deaths and Mortality per cent. of Acute Cases during 1893.
		From City Hospital North.	From City Hospital South.					
Scarlatina	—	228	451	284	176	963	4	.58
Smallpox	50	—	—	77	—	127	—	7
Typhoid Fever ..	—	—	56	37	14	93	—	6
Typhus Fever....	—	—	—	22	—	22	—	5
Measles	3	—	—	4	2	7	—	—
Chicken Pox	—	—	—	18	1	18	—	1
Diphtheria	—	—	—	4	—	4	—	—
Whooping Cough	—	—	—	2	—	2	—	—
Diarrhoea.....	—	—	—	4	—	4	—	—
Other Diseases ..	—	—	23	—	—	23	—	1
Isolation	—	1	9	—	—	10	—	1
Total	53	228	508	484	193	1273	4	.58
							34	7.02

Visiting Physician, Dr. ROBERTS.

Resident Physician, Dr. JOHNSON.

CITY OF LIVERPOOL.

RATE OF MORTALITY AMONGST PATIENTS TREATED AT HOME
AND PATIENTS TREATED IN HOSPITAL.

Year.	Scarlet Fever.		Typhoid Fever.	
	Home.	Hospital.	Home.	Hospital.
	Per cent.	Per cent.	Per cent.	Per cent.
1891	11·6	6·0	20·7	9·1
1892	9·3	5·6	17·3	14·4
1893	6·9	5·3	17·8	11·5

HOME MORTALITY.

Year.	Disease.	Cases.	Deaths.	Per cent.
1891	Typhoid	303	63	20·7
1892	Fever	443	77	17·3
1893		956	171	17·8
1891	Scarlet	728	85	11·6
1892	Fever	953	89	9·3
1893		2,158	149	6·9

HOSPITAL MORTALITY.

Year.	Disease.	Cases.	Deaths.	Per cent.
1891	Typhoid	283	26	9·1
1892	Fever	236	34	14·4
1893		431	50	11·5
1891	Scarlet	546	33	6·0
1892	Fever	633	36	5·6
1893		1,391	74	5·3

There appears to be a general feeling that the hospitals receive an undue proportion of specially severe cases, sent in because they have become too great a tax upon the strength and resources of the relatives who had at first hoped to be able to nurse them : thus, removal rendered necessary by development of serious symptoms, takes place at a time when it must necessarily be prejudicial to the patient's chances of recovery.

TABLE OF DEATHS

DURING THE YEAR 1893, IN THE URBAN SANITARY DISTRICT OF LIVERPOOL, CLASSIFIED ACCORDING TO DISEASES, AGES, AND LOCALITIES.

(I.) NAMES OF LOCALITIES adopted for the purpose of these Statistics ; public institutions being shown as separate localities.	MORTALITY FROM ALL CAUSES, AT SUBJOINED AGES.										MORTALITY FROM SUBJOINED CAUSES, DISTINGUISHING DEATHS OF CHILDREN UNDER FIVE YEARS OF AGE.																					
	WARDS. (a.)	At all Ages. (b.)	Under 1 Year. (c.)	1 and under 5. (d.)	5 and under 15. (e.)	15 and under 25. (f.)	25 and under 60. (g.)	60 and upwards. (h.)	(i.)	Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhus.	Enteric or Typhoid.	Con-tinued.	Fevers.	Re-lapsing.	Puer-pal.	Cholera and Cholera Infantum.	Erysipelas.	Measles.	Whooping Cough.	Diarrhoea and Dysentery.	Rheumatic Fever.	Ague.	Phthisis.	Bronchitis, Pneumonia and Pleurisy.	Heart Disease.	Injuries.	All Other Diseases.	Total. (22.)
Scotland	1383	471	290	65	46	385	126	Under 5 upwards	..	17	2	4	..	..	..	..	..	..	2	28	38	127	..	..	7	160	1	40	334	761		
Vauxhall	189	61	36	7	2	58	25	Under 5 upwards	..	1	1	..	..	..	..	..	..	..	..	5	2	8	1	..	30	..	8	42	97			
St. Paul's and Exchange	302	71	46	16	9	110	50	Under 5 upwards	..	2	2	..	..	..	..	..	..	..	..	..	..	12	..	..	24	1	8	64	117			
St. Anne's and Lime Street	593	193	113	24	22	174	67	Under 5 upwards	..	1	3	..	..	..	..	..	..	..	..	..	..	2	..	..	23	52	15	14	70	185		
Castle Street and St. Peter's	77	23	10	6	2	28	8	Under 5 upwards	..	..	..	..	..	..	..	..	..	..	..	11	11	33	..	..	1	69	..	22	154	306		
Pitt Street and Great George	335	92	63	10	12	110	48	Under 5 upwards	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	47	81	29	15	100	287	
Rodney Street and Abercromby	601	152	75	17	20	165	172	Under 5 upwards	..	4	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	33	
Everton	2577	910	488	125	78	616	360	Under 5 upwards	..	28	5	2	..	4	..	..	..	..	..	11	..	10	14	22	..	..	3	43	..	11	117	227
Kirkdale	1422	465	281	80	40	361	195	Under 5 upwards	..	17	6	4	..	4	..	..	..	..	..	7	..	62	37	17	..	..	1	35	..	9	71	155
West Derby	1601	566	254	60	68	393	260	Under 5 upwards	..	16	6	1	..	1	..	..	..	..	..	4	..	32	34	92	..	..	3	442	..	15	442	820
The Toxteths	2116	701	317	96	71	528	403	Under 5 upwards	..	20	2	1	..	2	..	..	..	..	..	7	..	11	46	101	..	..	12	206	1	34	579	1018
(II.) Public Institutions. Workhouses & Hospitals	2723	158	199	183	205	1425	553	Under 5 upwards	2	54	4	1	2	2	..	..	..	..	1	12	8	10	2	..	5	47	1	34	172	357		
									6	30	3	..	32	96	..	..	..	..	7	1	7	..	..	30	4	..	392	533	210	177	832	2366
Totals	13919	3863	2172	689	575	4353	2267	Under 5 upwards	7	161	32	14	2	13	208	2	..	..	49	9	18	13	15	756	2	..	39	1138	5	261	3052	6035



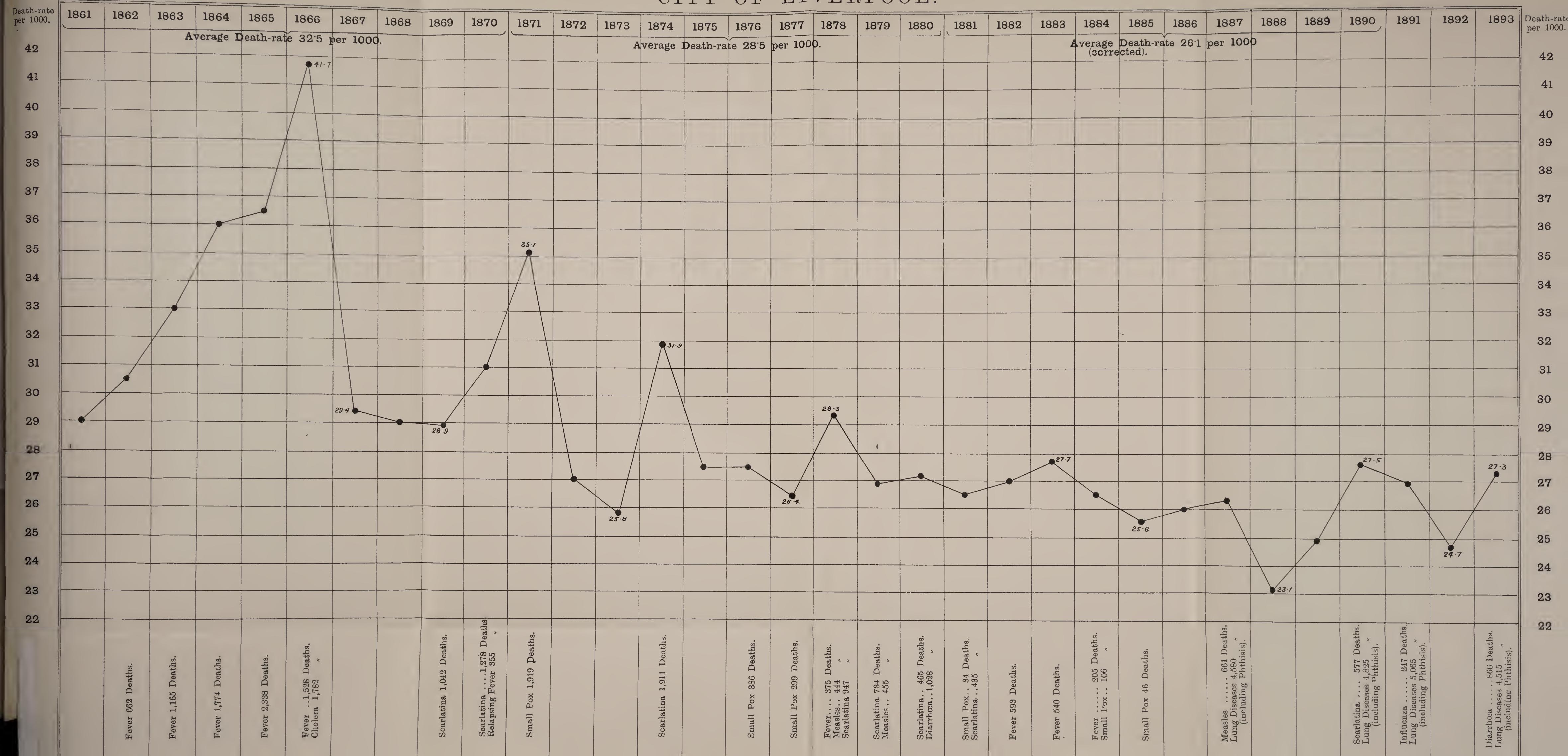
TABLE OF POPULATION, BIRTHS, AND OF NEW CASES OF INFECTIOUS SICKNESS
coming to the knowledge of the Medical Officer of Health, during the year 1893, in the Urban Sanitary District of Liverpool; classified according to DISEASES and LOCALITIES.

NAMES OF LOCALITIES adopted for the purpose of these Statistics; Public Institutions being shown as separate localities.	POPULATION AT ALL AGES			Registered Births.	NEW CASES OF SICKNESS IN EACH LOCALITY, COMING TO THE KNOWLEDGE OF THE MEDICAL OFFICER OF HEALTH.												NUMBER OF SUCH CASES REMOVED FROM THEIR HOMES IN THE SEVERAL LOCALITIES FOR TREATMENT IN ISOLATION HOSPITALS.																
	Census, 1891.	Estimated to Middle of 1893.	(d)		Smallpox.	Scarlatina.	Diphtheria.	Membranous Group.	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	
									WARDS.	(a.)	(b.)	(c.)	FEBVERS.	Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.	Cholera.	Erysipelas.	Smallpox.	Scarlatina.	Membranous Group.	FEBVERS.	Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.	Cholera.	Erysipelas.		
Scotland	53713	50508	2027	8	240	10	6	51	156	21	..	6	..	2	165	8	125	..	..	48	56	10	..	..	..	..	..	..	..	..	..
Vauxhall	7166	6034	248	1	27	2	..	1	13	2	..	..	..	..	23	1	13	..	..	1	3	1	..	..	..	..	..	..	..	..	..
St. Paul's and Exchange .. .	12931	11732	351	4	32	6	1	6	26	..	..	..	..	..	44	4	10	1	..	6	4	..	..	..	..	..	..	..	..	..	..
St. Anne's and Lime Street .. .	27641	25949	788	7	110	10	2	6	70	4	..	6	..	1	112	7	63	2	1	6	19	3	..	..	..	..	..	..	..	..	..
Castle Street and St. Peter's .. .	4924	4604	93	..	48	2	..	..	10	..	..	..	..	..	10	..	36	1	..	..	5	..	..	..	..	..	..	..	..	..	..
Pitt Street and Great George .. .	14517	13680	388	7	84	3	45	72	7	46	15	
Rodney Street and Abercromby .. .	36089	34881	1210	8	221	8	3	3	72	1	..	3	..	1	55	7	90	..	..	1	18	..	..	..	..	..	..	..	..	..	..
Everton (H)	110556	110638	4105	10	779	50	12	90	338	30	..	18	..	2	170	10	304	6	1	84	114	7	..	..	..	..	..	..	..	..	..
Kirkdale	66131	67123	2479	9	523	23	8	12	185	23	..	16	2	..	105	9	130	1	..	12	46	2	..	..	..	..	..	..	..	..	..
West Derby	76971	78117	2852	5	605	54	4	4	172	2	..	18	..	..	113	5	226	5	..	2	42	1	..	..	..	..	..	..	..	..	..
The Toxteths (H H)	107341	107248	3787	10	795	39	4	3	278	14	..	10	..	..	277	9	269	5	..	..	113	5	..	..	..	..	..	..	..	..	..
Public Institutions. } Workhouses and Hospitals	1	58	1	..	5	20	5	..	1	49	1	53	1	..	5	2	
Emigrants, Seamen, &c., passing through the City	5	16	2	..	2	11	2	5	15	2	..	2	9	2	
TOTALS	517980	510514	18328	75	3538	210	40	183	1396	99	..	82	2	7	1195	73	1380	24	2	166	446	31	..	..	..	..	..	..	..	..	..



- 4 JUL 94

CITY OF LIVERPOOL.



DEATHS REGISTERED IN THE CITY OF LIVERPOOL,
DURING THE YEAR ENDING SATURDAY, 30TH DECEMBER. 1893.

